

**EPA Registration Number**  
**87290-30**

# Material Sent for Data Extraction

Reg. # 87290-30

Description: Air. CSFs

☐ Material(s) Sent to Data Extraction Contractors:

☐ New Stamped Label Dated \_\_\_\_\_

☐ Notification Dated \_\_\_\_\_

☒ New CSF(s) Dated # 243 dated 4/12/17

☐ Other: \_\_\_\_\_

☐ Decision #: \_\_\_\_\_

☐ Other Action/Comments: \_\_\_\_\_

File this coversheet and attached materials in the jacket. It must be well organized and clipped together, NOT STAPLED. Then give the jacket with the coversheet and materials to staff in the Information Services Center (ISC) (Room S-4900). If a jacket is full or only available as an image, please file materials in a new jacket and bring it down to the (ISC). For further information please call 703-605-0716.

Reviewer: EW Hall

Phone: 347-89101 Division: KD

Date: 6/16/17



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF  
CHEMICAL SAFETY AND  
POLLUTION PREVENTION

Applicant

Willowood LLC  
1600 NW Garden Valley Blvd.  
Suite 130  
Roseburg, OR 97471

Mailed To Agent

Lori Kohler  
Wagner Regulatory Associates, Inc.  
P.O. Box 640  
Hockessin, DE 19707

Subject: Willowood Mepi Chlor 4.2%  
EPA Reg. No. 87290-30  
Notification dated 4/9/12  
EPA Decision No. 464640

**MAY 16 2012**

Dear Ms. Kohler

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action(s) requested fall within the scope of PRN 98-10. The alternate confidential statement of formula (CSF) numbers 2 and 3; both dated 4/9/12, are acceptable and will be added to the regulatory file for the product. If you have any questions, please contact Shaunta Hill at 703-3437-8961 or by email at [hill.shaunta@epa.gov](mailto:hill.shaunta@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Marcel Howard", is written over a horizontal line.

Marcel Howard  
Acting Product Manager 20  
Fungicide Branch  
Registration Division (7504P)

Receipt for Section 3

S: P15384

Regulatory Type: Product Registration - Section 3

Application Type: Notification

Company: 87290 WILLOWOOD, LLC

Risk Manager: Registration Division, Risk Management Team 20

Product #: 87290-30

Product Name: WILLOWOOD MEPI CHLOR 4.2%

Me Too Section3: 88330-241

Me Too Product Name: MEPICHLOR 4.2% LIQUID

Application Date: 09-Apr-2012

Front End Date: 17-Apr-2012

FFS Due Date:

OPP Target Date:

Fast Track:

Receipt Description: CSF Notification

Form A:

Fee For Service: Yes

Fee For Service: No

Fee For Service: Yes

Fee For Service: No

OPP Rec'd Date: 17-Apr-2012

Risk Manager Send Date: 17-Apr-2012

Negotiated Due Date:

New Ingredient:

New Ingredient Request Date:

New Ingredient Received Date:

Signature Date:

Print Letter

Enter More Information

Tracking

View/Edit

Receipt Content

CSF



April 9, 2012

Document Processing Desk (NOTIF)  
ATTN: Shaja Joyner, PM 20  
Registration Division (7504P)  
U.S. Environmental Protection Agency  
Office of Pesticide Programs  
Room 5-4900, One Potomac Yard  
2777 South Crystal Drive  
Arlington, Virginia 22202-4501

Dear Ms. Joyner:

**Subject:** Willowood Mepi Chlor 4.2%, EPA Registration Number 87290-30  
Resubmission of Notification of Alternate Confidential Statement of Formula (CSF)  
per PR Notice 98-10 § III.A in response to Agency letter dated April 5, 2012  
EPA Decision No. 461708

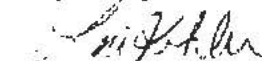
Wagner Regulatory Associates, Inc., as agent for Willowood LLC, resubmits the enclosed alternate CSFs for the above-referenced product in response to the Agency letter dated April 5, 2012. Enclosed are Alternate 2 CSF and Alternate 3 CSF. The addresses in Boxes 1 and 2 have been corrected as instructed in the Agency letter dated April 5, 2012. As noted in the original submission, an additional registered source of active ingredient and an additional producer were added to these CSFs. No other changes have been made to these CSFs.

In support of this request, the following documents are attached:

- Letter from Willowood LLC appointing Wagner Regulatory Associates, Inc. as their agent
- Application for Pesticide Notification (8570-1)
- Formulators Exemption (8570-27)
- Confidential Statement of Formula (8570-4) with Attachment, 2 copies

If you have any questions about this submission please contact the undersigned at (302) 635-7281 or [Lori@wagnerreg.com](mailto:Lori@wagnerreg.com).

Respectfully submitted,



Lori Kohler  
Agent for Willowood LLC

Enclosures



**WILLOWOOD USA**

Your preferred manufacturer of post patent products

August 31, 2010

To: Whom it May Concern

Re: Designation of Agent for:  
**Willowood USA, LLC**  
1600 NW Garden Valley Blvd.  
Suite 130  
Roseburg, OR 97471

Dear Sir or Madam:

This letter serves as notification that Willowood USA, LLC has appointed Wagner Regulatory Associates, Inc. (WRA, Inc.) to serve as the Agent on our company's behalf regarding all state and federal regulatory matters relative to products that Willowood USA, LLC will register with US EPA and the states. Please forward all correspondence for our company and its products to:

Wagner Regulatory Associates, Inc.  
P.O. Box 640  
Hockessin, DE 19707-0640

Thank you for your time and assistance. Please feel free to call me at if you have any questions.

Respectfully submitted,

  
Brian Heinze  
President/CEO

cc: WRA, Inc.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF  
CHEMICAL SAFETY AND  
POLLUTION PREVENTION

Applicant

Willowood LLC  
1600 NW Garden Valley Blvd.  
Suite 130  
Roseburg, OR 97471

Mailed To Agent

Lori Kohler  
Wagner Regulatory Associates, Inc.  
P.O. Box 640  
Hockessin, DE 19707

APR 05 2012

Subject: Willowood Mepi Chlor 4.2%  
EPA Reg. No. 87290-30  
Notification dated 2/14/12  
EPA Decision No. 461708

Dear Ms. Kohler

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action(s) requested fall within the scope of PRN 98-10. The alternate confidential statement of formula (CSF) dated 2/14/12 is not acceptable. P.O. Box addresses are not acceptable for inclusion in box 2 on the CSF form or the CSF attachment. In addition, the applicant's address must be provided in box 1. Please resubmit your alternate CSF request including the physical address for each producer location and the correct applicant address. Note that the applicant's address must also be provided on administrative documents for future submissions.

If you have any questions, please contact Shaunta Hill at 703-3437-8961 or by email at [hill.shaunta@epa.gov](mailto:hill.shaunta@epa.gov).

Sincerely,

A handwritten signature in cursive script, appearing to read "C. Giles-Parker".

Cynthia Giles-Parker  
Acting Product Manager 20  
Fungicide Branch  
Registration Division (7504P)

# Receipt for Section 3

S: 812198

Resubmission: ☐ Yes ☒ No

Regulatory Type: Product Registration - Section 3

Fee For Service: ☐ Yes ☒ No

Application Type: Notification

Company: 87290 WILLOWOOD, LLC

V

Risk Manager: Registration Division, Risk Management Team 20

Product #: 87290-30

Product Name: WILLOWOOD MEPI CHLOR 4.2%

Overlaid:

Me Too

Section3: 88330-241

Me Too

Product Name: MEPICHLOR 4.2% LIQUID

Application Date: 14-Feb-2012

id

OPP Rec'd Date: 23-Feb-2012

id

Front End Date: 23-Feb-2012

id

Risk Manager Send Date: 23-Feb-2012

id

FFS Due Date:

Negotiated Due Date:

OPP Target Date:

Fast Track: ☐

New Ingredient: ☐

Receipt Description:

Notification of Alternate CSF per PR Notice 98-10

CSF Notification

Form A: ☐

Signature Date:

Form B: ☐

Signature Date:

Print Letter

Enter More Information

Tracking

Receipt Content

Des

CSF

View/Edit

New Ingredient

Request Date:

New Ingredient

Received Date:

2/27



**WRA**

Wagner Regulatory Associates, Inc.  
P.O. Box 640  
7217 Lancaster Pike, Suite A  
Hockessin, Delaware 19707

February 14, 2012

Document Processing Desk (NOTIF)  
ATTN: Shaja Joyner, PM 20  
Registration Division (7504P)  
U.S. Environmental Protection Agency  
Office of Pesticide Programs  
Room S-4900, One Potomac Yard  
2777 South Crystal Drive  
Arlington, Virginia 22202-4501

Dear Ms. Joyner:

**Subject: Willowood Mepi Chlor 4.2%, EPA Registration Number 87290-30**  
**Notification of Alternate Confidential Statement of Formula (CSF)**  
**per PR Notice 98-10 § III.A.**

Wagner Regulatory Associates, Inc., as agent for Willowood LLC, respectfully submits an alternate CSF for the above-referenced product in accordance with PR Notice 98-10. An additional registered source of active ingredient has been added and an additional formulator. No other changes have been made to this CSF.

In support of this request, the following documents are attached:

- Letter from Willowood LLC appointing Wagner Regulatory Associates, Inc. as their agent
- Application for Pesticide Notification (8570-1)
- Formulators Exemption (8570-27)
- Confidential Statements of Formula (8570-4) with Attachments [REDACTED]

If you have any questions about this submission please contact the undersigned at (302) 635-7281 or [Lori@wagnerreg.com](mailto:Lori@wagnerreg.com).

Respectfully submitted,

Lori Kohler  
Agent for Willowood LLC

Enclosures



United States  
**Environmental Protection Agency**  
 Washington, DC 20460

☐ **Registration**
☐ **Amendment**
☒ **Other**

OPP Identifier Number

### Application for Pesticide - Section I

1. Company/Product Number 87290-30	2. EPA Product Manager Shaja Joyner	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Willowood LLC/Willowood Mepi Chlor 4.2%	PM# 20	
5. Name and Address of Applicant (Include Zip Code) Willowood LLC c/o Wagner Regulatory Associates, Inc. P.O. Box 640 Hockessin, DE 19707 <input type="checkbox"/> Check if this is a new address	6. <b>Expedited Review.</b> In accordance with FIFRA Section 3(c)(3) (b)(I), my product is similar or identical in composition and labeling to: EPA Reg. No. Product Name:	

### Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Notification of alternate CSF per PR Notice 98-10.	<input type="checkbox"/> Other - Explain below.

**Explanation:** Use additional page(s) if necessary. (For Section I and Section II.)

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

### Section - III

#### 1. Material This Product Will Be Packaged In:

Child-Resistant Packaging <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Type of Container <input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) HDPE lined bags
* Certification must be submitted		If "Yes" No. per container Unit Packaging wgt. _____	If "Yes" No. per container Package wgt. _____

3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container	4. Size(s) Retail Container 1 gallon	5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Other _____ adhesive-backed label <input checked="" type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled		

### Section - IV

#### 1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)

Name Lori Kohler	Title Agent for Willowood LLC	Telephone No. (Include Area Code) (302) 635-7281
---------------------	----------------------------------	---

<b>Certification</b> I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received  <div style="text-align: center;">(Stamped)</div>
2. Signature 	3. Title Agent for Willowood LLC	
4. Typed Name Lori Kohler	5. Date February 14, 2012	





United States  
**Environmental Protection Agency**  
 Washington, DC 20460  
**Formulator's Exemption Statement**  
 (40 CFR 152.85)

Applicant's Name and Address <b>Willowood LLC</b> <b>c/o Wagner Regulatory Associates, Inc.</b> <b>P.O. Box 640</b> <b>Hockessin, DE 19707</b>	EPA File Symbol/Registration Number <b>87290-30</b>
	Product Name <b>Willowood Mepi Chlor 4.2%</b>
	Date of Confidential Statement of Formula (EPA Form 8570-4) <b>02/14/2012</b>

As an authorized representative of the applicant for registration of the product identified above, I certify that:

(1) This product contains the following active ingredient(s):

**Mepiquat chloride**

(2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another person and meets the requirements of 40 CFR section 158.50(e)(2) or (3).

(3) Indicate by checking (A) or (B) below which paragraph applies:

☒ (A) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).

OR

☐ (B) The Confidential Statement of Formula (CSF)(EPA Form 8570-4) referenced above and on file with the EPA is complete, current, an accurate and contains the information required on the current CSF.

(4) The following active ingredients in this product qualify for the formulator's exemption.

Source		
Active Ingredient	Product Name	Registration Number
Mepiquat chloride	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]
	[REDACTED]	
Signature 	Name and Title <b>Lori Kohler, Agent</b>	Date <b>02/14/2012</b>

EPA Form 8570-27 (Rev. 06-2004)

Copy 1 - EPA  
Copy 2 - Applicant copy

\*Product ingredient source information may be entitled to confidential treatment\*



**WILLOWOOD USA**

Your preferred manufacturer of post patent products

August 31, 2010

To: Whom it May Concern

Re: Designation of Agent for:  
**Willowood USA, LLC**  
**1600 NW Garden Valley Blvd.**  
**Suite 130**  
**Roseburg, OR 97471**

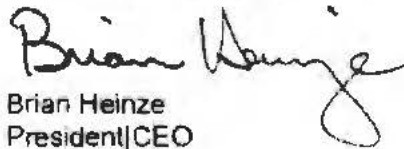
Dear Sir or Madam:

This letter serves as notification that Willowood USA, LLC has appointed Wagner Regulatory Associates, Inc. (WRA, Inc.) to serve as the Agent on our company's behalf regarding all state and federal regulatory matters relative to products that Willowood USA, LLC will register with US EPA and the states. Please forward all correspondence for our company and its products to:

Wagner Regulatory Associates, Inc  
P O Box 640  
Hockessin, DE 19707-0640

Thank you for your time and assistance. Please feel free to call me at if you have any questions.

Respectfully submitted,



Brian Heinze  
President/CEO

cc: WRA, Inc.





Wagner Regulatory Associates, Inc.  
P.O. Box 640  
7217 Lancaster Pike, Suite A  
Hockessin, Delaware 19707

February 27, 2012

Document Processing Desk  
Ms. Shaja Joyner, PM 20  
Registration Division (7504P)  
U.S. Environmental Protection Agency  
Office of Pesticide Programs  
1200 Pennsylvania Avenue NW  
Washington, D.C. 20460

Dear Ms. Joyner,

**Subject: Final Printed Label  
Willowood Mepi Chlor 4.2% (EPA Registration Number: 87290-30)**

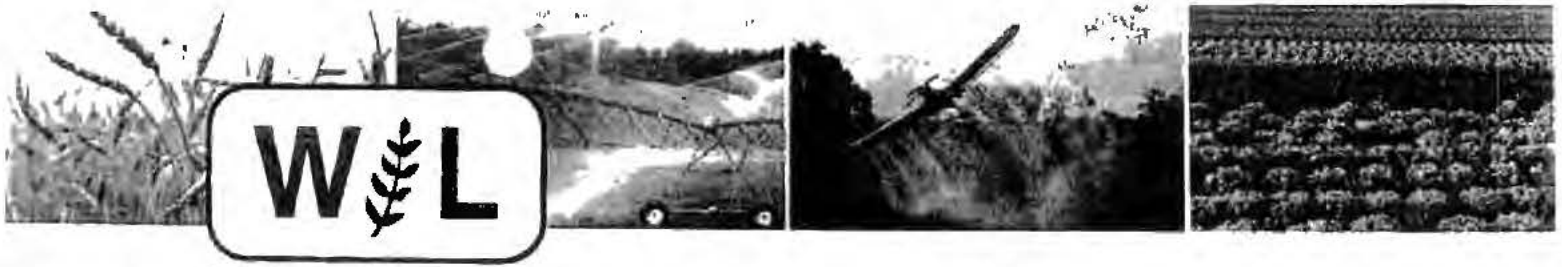
Wagner Regulatory Associates, Inc., on behalf of Willowood LLC, respectfully submits the enclosed final printed label for the subject product as required in the EPA Notice of Pesticide Registration dated February 2, 2012. No changes were made to this label. Also enclosed is an Agent letter and EPA Application form (8570-1).

Please feel free to contact me via email at [lori@wagnerreg.com](mailto:lori@wagnerreg.com) or telephone at (302) 635-7281 if you have any questions or require additional information.

Respectfully submitted,

Lori Kohler  
Agent for Willowood, LLC

Enclosures



**WILLOWOOD USA**

Your preferred manufacturer of post patent products

August 31, 2010

To: Whom it May Concern

Re: Designation of Agent for:  
**Willowood USA, LLC**  
1600 NW Garden Valley Blvd.  
Suite 130  
Roseburg, OR 97471

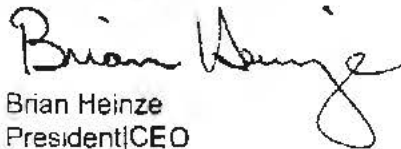
Dear Sir or Madam:

This letter serves as notification that Willowood USA, LLC has appointed Wagner Regulatory Associates, Inc. (WRA, Inc.) to serve as the Agent on our company's behalf regarding all state and federal regulatory matters relative to products that Willowood USA, LLC will register with US EPA and the states. Please forward all correspondence for our company and its products to:

Wagner Regulatory Associates, Inc.  
P.O. Box 640  
Hockessin, DE 19707-0640

Thank you for your time and assistance. Please feel free to call me at if you have any questions.

Respectfully submitted,

  
Brian Heinze  
President/CEO

cc: WRA, Inc.



United States  
**Environmental Protection Agency**  
 Washington, DC 20460

Registration

OPP Identifier Number

Amendment

☒ Other

### Application for Pesticide - Section I

1. Company/Product Number 87290-30	2. EPA Product Manager Shaja Joyner	3. Proposed Classification
4. Company/Product (Name) Willowood, LLC/ Willowood Mepi Chlor 4.2%	PM# 20	<input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
5. Name and Address of Applicant (Include Zip Code) Willowood, LLC c/o Wagner Regulatory Associates, Inc. P.O. Box 640 Hockessin, DE 19707 <input type="checkbox"/> Check if this is a new address		6. <b>Expedited Review.</b> In accordance with FIFRA Section 3(c)(3) (b)(I), my product is similar or identical in composition and labeling to: EPA Reg. No. Product Name:

### Section - II

<input type="checkbox"/> Amendment - Explain below.	<input checked="" type="checkbox"/> Final printed labels in response to Agency letter dated February 2, 2012
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

**Explanation:** Use additional page(s) if necessary. (For Section I and Section II.)

### Section - III

1. <b>Material This Product Will Be Packaged In:</b>				2. <b>Type of Container</b>	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Metal	
	If "Yes" No. per Unit Packaging wgt. container	If "Yes" No. per Package wgt. container		<input checked="" type="checkbox"/> Plastic	
* <b>Certification must be submitted</b>				<input type="checkbox"/> Glass	
				<input type="checkbox"/> Paper	
				<input type="checkbox"/> Other (Specify) HDPE lined bags	
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 2.5 gallons		5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product		<input type="checkbox"/> Lithograph <input checked="" type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled			
		<input type="checkbox"/> Other _____			

### Section - IV

1. <b>Contact Point</b> (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Lori Kohler	Title Agent for Willowood, LLC	Telephone No. (Include Area Code) (302) 635-7281
<b>Certification</b> I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received  <div style="text-align: center;">(Stamped)</div>
2. Signature 	3. Title Agent for Willowood, LLC	
4. Typed Name Lori Kohler	5. Date February 27, 2012	

NOT REVIEWED  
In Accordance with PR Notice 82-2  
Based on Draft Labeling Dated

# **WL Willowood** **MEPI CHLOR 4.2%**

**ACTIVE INGREDIENT:**

\*Mepiquat Chloride: N,N-dimethylpiperidinium chloride ..... 4.2%

**OTHER INGREDIENTS:** ..... 95.8%

**TOTAL:** ..... 100.0%

\*Contains 0.35 pounds active ingredient per gallon

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION-PRECAUCION**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a  
usted en detalle. (If you do not understand the label, find someone to  
explain it to you in detail.)

See Additional Precautionary Statements inside Booklet

EPA Reg. No. 87290-30

EPA Est. No. 82486-MC-001

**Manufactured For:**

Willowood, LLC  
1600 NW Garden Valley Blvd. #120  
Roseburg, OR 97471

**NET CONTENTS: 2.5 Gallons**

NOT REVIEWED  
In Accordance with PR Notice 82-2  
Based on Draft Labeling Dated

2/2/12

### FIRST AID

<b>If in eyes:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"><li>• Call poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice</li></ul>

**NOTE TO PHYSICIAN:** No known antidote, treat symptomatically.

**EMERGENCY CONTACT:** Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For Emergency Information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378, Mon. to Fri. 7:30 am to 3:30 pm Pacific Time, or your poison control center at 1-800-222-1222.

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

##### CAUTION

Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with eyes, skin and clothing.

##### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance selection chart.

##### Applicators and other handlers must wear:

1. Long-sleeved shirt and long pants
2. Chemical-resistant gloves such as Nitrile, Butyl, Neoprene, and/or Barrier Laminate.
3. Shoes plus socks

##### USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

### **User Safety Recommendations**

#### **Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### **ENVIRONMENTAL HAZARDS**

Do not apply directly to water, to areas where surface water is present or to intertidal area below the high water mark. Do not contaminate water when disposing of rinsate or equipment washwater. Do not contaminate water by cleaning of equipment or disposal of wastes.

### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Do not apply this product through any type of irrigation system.

### **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water, is:

1. Coveralls
2. Chemical resistant gloves made of any waterproof material
3. Shoes plus socks

### **PRODUCT INFORMATION**

Willowood Mepi Chlor 4.2% is a foliar applied plant regulator. It allows the grower to manage the cotton plant for short-season production leading to reduced risk of yield and quality loss due to delayed and prolonged harvest. Benefits derived from the use of Willowood Mepi Chlor 4.2% include increased early boll retention and/or larger bolls, reduced plant height which provides a more open canopy, less boll rot, improved defoliation, less trash and lower ginning costs, better harvest efficiency and a darker leaf color. These benefits can provide for earlier maturity and often result in improved yields.

#### **Early Application of Willowood Mepi Chlor 4.2%**

Growers may use low-rate multiple applications, or higher, less frequent applications which provide maximum flexibility under a wide range of growing conditions. Willowood Mepi Chlor 4.2% should not be applied to plants under stress. If stress is alleviated, plants should be evaluated for vegetative growth before additional applications are made. Willowood Mepi Chlor 4.2% may be tank mixed with insecticides/miticides when application timing coincides. (See RESTRICTIONS AND LIMITATIONS)

Fields should be carefully scouted. Willowood Mepi Chlor 4.2% should not be applied if plants are under any form of stress. In the absence of stress, a maximum of five low rate applications can be made each season. The first application can be applied at the matchhead square stage. The rate and timing of subsequent applications depend on growing conditions and desired benefits. Under good growing conditions, additional treatments of 2-4 fl. oz. per acre can be made at 7-14 day intervals. Higher rates of Willowood Mepi Chlor 4.2%, 4 - 12 fl. oz./A (1/4 - 3/4 pt/A), should be used if vegetative growth becomes excessive or a greater degree of height control is desired. Do not use more than a total of 48 fl. oz. (3 pts) of Willowood Mepi Chlor 4.2% per acre in a growing season.

If significant loss of squares and/or young bolls has occurred earlier due to insect pressure or other stresses, but now these stresses have been alleviated, the need for Willowood Mepi Chlor 4.2% is increased - excess vegetative growth is likely because of poor boll load.

#### **Late Season Application of Willowood Mepi Chlor 4.2%**

Late application of Willowood Mepi Chlor 4.2% (approximately during the fourth to sixth week of blooming) can provide certain benefits to cotton. However, it should not and does not substitute for early season use, the time of the greatest benefit from the use of Willowood Mepi Chlor 4.2%. Late season application can lead to one or more of the following: reduction in late season vegetative growth or regrowth after cutout or defoliation, more complete and manageable cutout, better defoliation, earlier maturity and reduction in trash and lower ginning costs. Some of these effects may favorably influence the yield potential and fiber quality. A late season application of Willowood Mepi Chlor 4.2% should be applied only if fields are not drought or nutrient stressed; that is, those fields likely to experience additional vegetative growth or regrowth. However, fields that are very rank and extremely vigorous due to a combination of poor boll load and excellent growing conditions may not respond as much as desired to late season applications at the specified rates.

#### **Timing for Late Season Applications**

- A. On fields where cotton cuts out and then starts regrowth: apply when regrowth begins, as evidenced by new leaves in the terminal and stem elongation. This would often, but not always, be in the period of 5-6 weeks after the first bloom.
- B. On fields where cotton never completely cuts out, apply Willowood Mepi Chlor 4.2% when there are 4-6 nodes above the white flower (NAWF). Measure NAWF by counting the number of mainstem nodes from the first position white bloom (the one closest to the mainstem) to the terminal. Count the node with the first position white bloom as zero and the last node in the terminal which is counted should have a leaf at least the size of a quarter. Generally, the NAWF first reaches 4-6 during the fourth to sixth week of bloom. During this time period, the NAWF should be decreasing about one node every 5-6 days - If its rate of decrease is less, this means that the plant is not cutting out soon enough (the crop is too vigorous). If the fifth week of bloom arrives and NAWF is still above 5-6, apply Willowood Mepi Chlor 4.2%.

#### **Use Rate for Late Season Application**

Willowood Mepi Chlor 4.2% should be applied at a rate between 8 - 24 fl. oz. (1/2 pint to 1 1/2 pints) per acre. Use the lower rate range on cotton with only moderate additional growth potential, and the higher rate range on fields likely to continue vigorous growth. Total seasonal use per season (early plus late application) must not exceed 48 fl. oz./A (3 pt/A).

### **SPRAY VOLUMES**

For spray application, thorough coverage of cotton foliage is required.

#### **IN WATER:**

*Areas other than California:*

Ground Application - Use a minimum of 2 gal/A.

Aerial Application - Use a minimum of 2 gal/A.

*California Only:*

Ground Application - Use a minimum of 5 gal/A.

Aerial Application - Use a minimum of 5 gal/A.



**IN OIL:**

Use a minimum total oil volume of 2 pt/A for ultra low volume (ULV) aerial application. Application in oil is permitted only in AL, AR, FL, GA, LA, MO, MS, NC, OK, SC, TN and TX. Use a nonphytotoxic oil concentrate which contains either a petroleum or vegetable oil base, contains only EPA-exempt ingredients, provides good mixing quality in the jar test (see "Compatibility" section), and has been used successfully in your locality. The oil diluent should contain emulsifiers which provide good mixing quality. If the oil does not contain an emulsifier, one must be added during mixing at a volume equal to 3% of the final volume of the mixing tank. Do not apply Willowood Mepi Chlor 4.2% as ULV without using emulsifiers. If using a vegetable oil based product, only highly refined concentrates should be used.

Mix under constant agitation. Pour one-half of the required volume of oil into the spray tank, followed by the emulsifier (if the oil does not already contain one) at approximately 3% of the final spray tank volume, and then pour in the Willowood Mepi Chlor 4.2% while the remainder of the oil is added. Constant, moderate agitation is required during and after mixing and during application.

**SPRAY DRIFT MANAGEMENT**

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- The distance of the outer most nozzles on the boom must not exceed  $\frac{3}{4}$  the length of the wingspan or rotor.
- Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they must be observed.

**AERIAL DRIFT REDUCTION ADVISORY INFORMATION**

The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

**INFORMATION ON DROPLET SIZE:** The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

**CONTROLLING DROPLET SIZE**

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

**BOOM LENGTH:** For some use patterns, reducing the effective boom length to less than  $\frac{3}{4}$  of the wingspan or rotor length may further reduce drift without reducing swath width.

**APPLICATION HEIGHT:** Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.



**SWATH ADJUSTMENT:** When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

**WIND:** Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

**TEMPERATURE AND HUMIDITY:** When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

**TEMPERATURE INVERSIONS:** Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

**SENSITIVE AREAS:** The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

#### **RAIN WASH-OFF PRECAUTION**

The use of a high quality, EPA exempt surfactant will enhance the uptake of Willowood Mepi Chlor 4.2% into the plant. Therefore, the use of a surfactant allows applications made as little as 4 hours prior to rainfall to be effective. Without a surfactant, the product should be used at least 8 hours prior to expected rainfall.

#### **COMPATIBILITY**

Willowood Mepi Chlor 4.2% is water based, and is compatible with most insecticides and miticides. If compatibility is in doubt, perform a jar test to check for compatibility. Willowood Mepi Chlor 4.2% can be used with foliar fertilizers if your prior experience shows the combination is compatible and will not injure cotton under your conditions. Caution should be used when applying with foliar fertilizers under conditions of extreme heat.

#### **RESTRICTIONS AND LIMITATIONS**

- Insect or mite damage to Willowood Mepi Chlor 4.2% treated crops can lead to yield decreases or other undesirable effects.
- Do not apply Willowood Mepi Chlor 4.2% to cotton that is under stress. If using low rate multiple applications, discontinue use until your crop has overcome any stress.
- Do not apply more than 48 fl. oz. (3 pts) of Willowood Mepi Chlor 4.2% per acre per season. The sum of all products and formulations containing mepiquat chloride must not exceed 0.132 pounds (60 grams) of mepiquat chloride per acre per season.
- Do not apply Willowood Mepi Chlor 4.2% within 30 days of harvest.
- Do not graze or feed cotton forage to livestock.
- Willowood Mepi Chlor 4.2% contains a dye and effectiveness is not related to the color of the spray solution.
- Do not tank mix with other products other than those mentioned under "COMPATIBILITY".
- Do not plant another crop within 75 days after last treatment.
- Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures.

## TIME AND RATE OF APPLICATION SHORT-STAPLE AND LONG-STAPLE (PIMA) COTTON

Directions for use should be observed as specified below:

### I. HIGH RATE SINGLE, LESS FREQUENT APPLICATIONS:

Use these instructions when you are not able to start growth regulation treatments early, or when you want to make the fewest number of applications.

AREA	TIME OF APPLICATION	RATE PER ACRE
	<b>First Application</b>	<b>8 to 16 fl. oz.</b>
AL, AR, AZ, CA, FL, GA, LA, MO, MS, NM, NC, SC, TN, VA	Apply when cotton is actively growing and is between 20 and 30" tall, but not more than 7 days beyond early bloom (5-6 blooms per 25 row feet). Also apply if cotton is 24" tall and has no blooms.	
	<b>Second Application</b>	<b>8 to 16 fl. oz.</b>
	Make another application in 2 to 3 weeks if additional growth control is desired.	
	<b>Third Application for control of excessive Vegetative Growth</b>	<b>8 to 16 fl. oz.</b>
	If the cotton field has a history of vigorous growth, apply a third application 1 to 2 weeks after the second application.	
	<b>Late Season Application</b>	<b>8 to 24 fl. oz.</b>
	See section titled "Late Season Application of Willowood Mepi Chlor 4.2%".	
<b>OK, TX (except Rio Grande Valley)</b>	<b>First Application</b>	<b>8 fl. oz.</b>
Areas without a history of excessive vegetative growth	Apply when cotton is in the early bloom stage (5-6 blooms per 25 row feet) and actively growing. Also apply if no blooms are present and the cotton is 20" tall and actively growing.	
	See RESTRICTIONS AND LIMITATIONS	
	<b>Second Application</b>	<b>8 fl. oz.</b>
	Make a second application in 2 to 3 weeks if additional growth control is desired.	
	<b>Third Application</b>	<b>8 fl. oz.</b>
	If conditions after the second application of Willowood Mepi Chlor 4.2% continue to favor vigorous growth, apply a third application 1 to 2 weeks after the second application.	
	<b>Late Season Application</b>	<b>8 to 24 fl. oz.</b>
	See section titled "Late Season Application of Willowood Mepi Chlor 4.2%".	

AREA	TIME OF APPLICATION	RATE PER ACRE
<b>OK, TX</b>  Areas with a history of excessive vegetative growth	<b>First Application</b>	<b>16 fl. oz.</b>
	For best results, apply when plants are in early bloom stage (5-6 blooms per 25 row feet) and an average of 24" tall. Treatments can also be made when cotton height averages a minimum of 20" and a maximum of 30" provided cotton is not more than 7 days beyond early bloom. If cotton is 24" tall and has no blooms, apply Willowood Mepi Chlor 4.2%.	
	See RESTRICTIONS AND LIMITATIONS	
	<b>Second Application</b>	<b>8 to 16 fl. oz.</b>
	For fields with a history of excessive growth, or if conditions after the first application favor excessive growth, make a second application in 2 to 3 weeks.	
	<b>Third Application</b>	<b>8 to 16 fl. oz.</b>
	If conditions after the second application of Willowood Mepi Chlor 4.2% continue to favor vigorous growth, apply a third application 1 to 2 weeks after the second application.	
	<b>Late Season Application:</b>	<b>8 to 24 fl. oz.</b>
	See section titled "Late Season Application of Willowood Mepi Chlor 4.2%".	

# Material Sent for Data Extraction

Reg. # 87290-30

Description: Registration

☒ Material(s) Sent to Data Extraction Contractors:

☒ New Stamped Label Dated 2/2/12

☐ Notification Dated \_\_\_\_\_

☒ New CSF(s) Dated Basic = 1/11/12  
Att #1 = 1/26/12

☐ Other: \_\_\_\_\_

☐ Decision #: \_\_\_\_\_

☐ Other Action/Comments: \_\_\_\_\_

File this coversheet and attached materials in the jacket. It must be well organized and clipped together, NOT STAPLED. Then give the jacket with the coversheet and materials to staff in the Information Services Center (ISC) (Room S-4900). If a jacket is full or only available as an image, please file materials in a new jacket and bring it down to the (ISC). For further information please call 703-605-0716.

Reviewer: E. Hill

Phone: 347-8901 Division: RD

Date: 2/2/12

NEW APPLICATIONS

DATE: 10/13/11

FILE NUMBER: 87290-GN

FEP (OPPIN ENTRY) per 10/13/11  
(Initial & date)

FILE ROOM: \_\_\_\_\_  
(Initial & date)

SIG: \_\_\_\_\_  
(Initial & date)

FILE ROOM: \_\_\_\_\_  
(Initial & date)

X ASSIGN TO PM 20 (NO DATA)

\_\_\_\_ JACKET TO SHELF (DATA)

FEB 02 2012



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

November 3, 2011

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

OPP Decision Number: D-456355  
EPA File Symbol or Registration Number: 87290-GN  
Product Name: WILLOWOOD MEPI CHLOR 4.2%  
EPA Application Receipt Date: 13-Oct-2011  
EPA Waiver Request Receipt Date: 13-Oct-2011  
EPA Company Number: 87290  
Company Name: WILLOWOOD, LLC

LORI KOHLER  
WAGNER REGULATORY ASSOCIATES, INC.  
WILLOWOOD, LLC  
P.O. BOX 640  
HOCKESSIN, DE 19707

SUBJECT: Approval of 50% Small Business Waiver Request

Dear Registrant:

The Office of Pesticide Programs has approved your request for 50% waiver of the pesticide registration fee associated with the action referenced above. The decision review period for this action will begin on the date of this letter.

The Action has been identified as Action Code: R300

NEW PRODUCT;ME-TOO PRODUCT FAST TRACK;

If you have any questions, please contact the Pesticide Registration Service Fee Ombudsman, at (703) 308-9362.

Sincerely,

A handwritten signature in black ink, appearing to read "Oscar Morales", is written over a horizontal line.

Oscar Morales, Director  
Information Technology & Resources Management Division  
Office of Pesticide Programs





## U.S. ENVIRONMENTAL PROTECTION

Office of Chemical Safety and Pollution Prevention  
Office of Pesticide Programs  
Registration Division (7504P)  
1200 Pennsylvania Ave., N.W.  
Washington, DC 20460

### NOTICE OF PESTICIDE:

☒ Registration  
☐ Reregistration  
(under FIFRA, as amended)

EPA Reg.  
Number:

87290-30

Date of Issuance:

FEB 02 2012

Term of Issuance:

Unconditional

Name of Pesticide Product:

Willowood  
Mepi Chlor 4.2%

Name and Address of Registrant (include ZIP Code):

Willowood, LLC  
c/o Wagner Regulatory Associates, Inc.  
P.O. Box 640  
Hockessin, DE 19707

Mailed to:

Lori Kohler  
Agent for Willowood

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration of your product under FIFRA sec 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.

Page 1 of 3

Signature of Approving Official:

Shaja B. Joyner, Product Manager (20)

Date:

FEB 02 2012

On page 1,

2. Change the product registration number to 87290-30.

On page 2,

3. The heading "User Safety Requirements" prior to the paragraph starting "Follow manufacturer's instructions".
4. Within the Use Safety Recommendations box, replace "Remove clothing immediately" with "Remove clothing/PPE immediately".

On page 3,

5. Within the Agricultural Use Requirements box:
  - a. Replace the common with a period following "40 CFR part 170" in the first sentence.
  - b. Replace the common with a period following "handlers of agricultural pesticides" in the second sentence.
  - c. Replace "ft" with "It" at the beginning of the third sentence.
  - d. Replace "statement" with "statements" in the sentence starting "It also contains specific instructions".
6. Within the Early Application of Willowood Mepi Chlor 4.2% section:
  - a. Replace "dosages" with "applications" in the first sentence of the first paragraph.
  - b. In the sentence starting "Higher rate of", add "4-12 fl. oz/A" prior to ( $\frac{1}{4}$ – $\frac{3}{4}$  pt/A).
  - c. In the final sentence of the final paragraph, add "(3 pts)" following "48 fl. oz".

On page 4,

7. Within the first paragraph starting "If significant loss", in the final sentence, replace "fruit" with "boll".
8. Within the Late Season Application of Willowood Mepi Chlor 4.2% section; in the final sentence replace "suggested" with "specified".
9. Within the Use Rate for Late Season Application section,
  - a. In the first sentence add "8-24 fl. oz" prior to " $\frac{1}{2}$  pt to  $1\frac{1}{2}$  pts per acre"; then place " $\frac{1}{2}$  pt to  $1\frac{1}{2}$  pts" in parenthesis.
  - b. In the final sentence, add "48 fl. oz/A" prior to "3pt/A"; then place "3 pt/A" in parenthesis.
10. Revised the sentence immediately following the heading "Spray Volumes" to read as follows: "For spray application, thorough coverage of cotton foliage is required".

On page 5,

11. Following the heading "Aerial Drift Reduction Advisory Information", add the following sentence: "The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information".



On page 7

12. Within the Restrictions and Limitations section

- a. In the third bullet, add "(3 pts)" following 48 fl. oz.
- b. Add the statement "Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures".

13. Within the Time and Rate of Application section, replace the heading "High rate single or multiple applications" with "High rate single, less frequent applications".

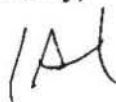
On page 11,

14. Within the Storage and Disposal box, replace the heading "Container Disposal" with "Container Handling".

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. Submit one copy of the revised final printed label for the record before the product is released for shipment. Ensure that the final printed label uses a font size of at least 12 point.

The Basic (dated 1/11/12) and the Alternate CSF (dated 1/26/12) are acceptable and will be added to the regulatory file. A copy of the label stamped "Accepted with Comments" is enclosed for your records. If you have any questions, please contact Shaunta Hill at 703-347-8961 or [hill.shaunta@epa.gov](mailto:hill.shaunta@epa.gov) or myself at 703-308-3194 or [joyner.shaja@epa.gov](mailto:joyner.shaja@epa.gov).

Sincerely,



Shaja B. Joyner  
Product Manager (20)  
Fungicide Branch  
Registration Division (7505P)

Enclosure:

Label stamped "Accepted with Comments"  
Product Chemistry review  
Acute Toxicity review

**Willowood Mepi Chlor 4.2%****Active Ingredient:**

\*Mepiquat Chloride: N,N-dimethylpiperidinium Chloride.....4.2%

**Other Ingredients:**.....95.8%**Total**.....100.0%

\*Contains 0.35 pounds active ingredient per gallon

**KEEP OUT OF REACH OF CHILDREN  
CAUTION - PRECAUTION**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

<b>FIRST AID</b>	
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>Call poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>NOTE TO PHYSICIAN:</b> No known antidote, treat symptomatically.	
<b>EMERGENCY CONTACT:</b> Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For 24-hour medical emergency assistance (human or animal) call 1-800-222-1222. For chemical emergency assistance (spill, leak, fire, or accident) call CHEMTREC at 1-800-424-9300.	

See Additional Precautionary Statements inside Booklet

EPA Reg. No. 87290-

EPA Est. No.

Net contents:

**Manufactured For:**  
Willowood USA, LLC  
1600 NW Garden Valley Blvd. Suite 120  
Roseburg, OR 97471

ACCEPTED  
with COMMENTS  
In EPA Letter Dated  
**FEB 02 2012**

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under EPA Reg. No.

87290-30

Page 1 of 12

**PRECAUTIONARY STATEMENTS****Hazards to Humans and Domestic Animals**

**CAUTION.** Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with eyes, skin and clothing.

**PERSONAL PROTECTIVE EQUIPMENT**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance selection chart.

**Applicators and other handlers must wear:**

1. Long-sleeved shirt and long pants
2. Chemical-resistant gloves such as Nitrile, Butyl, Neoprene, and/or Barrier Laminate.
3. Shoes plus socks

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

**USER SAFETY RECOMMENDATIONS**

Users should

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

Do not apply directly to water, to areas where surface water is present or to intertidal area below the high water mark. Do not contaminate water when disposing of rinsate or equipment washwater. Do not contaminate water by cleaning of equipment or disposal of wastes.

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**DIRECTIONS FOR USE**

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It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Do not apply this product through any type of irrigation system.

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statement on this label about personal protective equipment and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water, is:

1. Coveralls
2. Chemical resistant gloves made of any waterproof material
3. Shoes plus socks

**PRODUCT INFORMATION**

Willowood Mepi Chlor 4.2% is a foliar applied plant regulator. It allows the grower to manage the cotton plant for short-season production leading to reduced risk of yield and quality loss due to delayed and prolonged harvest. Benefits derived from the use of Willowood Mepi Chlor 4.2% include increased early boll retention and/or larger bolls, reduced plant height which provides a more open canopy, less boll rot, improved defoliation, less trash and lower ginning costs, better harvest efficiency and a darker leaf color. These benefits can provide for earlier maturity and often result in improved yields.

**Early Application of Willowood Mepi Chlor 4.2%**

Growers may use low-rate multiple applications, or higher, less frequent dosages which provide maximum flexibility under a wide range of growing conditions. Willowood Mepi Chlor 4.2% should not be applied to plants under stress. If stress is alleviated, plants should be evaluated for vegetative growth before additional applications are made. Willowood Mepi Chlor 4.2% may be tank mixed with insecticides/miticides when application timing coincides. (See RESTRICTIONS AND LIMITATIONS)

Fields should be carefully scouted. Willowood Mepi Chlor 4.2% should not be applied if plants are under any form of stress. In the absence of stress, a maximum of five low rate applications can be made each season. The first application can be applied at the matchhead square stage. The rate and timing of subsequent applications depend on growing conditions and desired benefits. Under good growing conditions, additional treatments of 2-4 fluid ounces per acre can be made at 7-14 day intervals. Higher rates of Willowood Mepi Chlor 4.2% (1/4 - 3/4 pt/A) should be used if vegetative growth becomes excessive or a greater degree of height control is desired. Do not use more than a total of 48 fl oz of Willowood Mepi Chlor 4.2% per acre in a growing season.

If significant loss of squares and/or young bolls has occurred earlier due to insect pressure or other stresses, but now these stresses have been alleviated, the need for Willowood Mepi Chlor 4.2% is increased - excess vegetative growth is likely because of poor fruit load.

#### **Late Season Application of Willowood Mepi Chlor 4.2%**

Late application of Willowood Mepi Chlor 4.2% (approximately during the fourth to sixth week of blooming) can provide certain benefits to cotton. However, it should not and does not substitute for early season use, the time of the greatest benefit from the use of Willowood Mepi Chlor 4.2%. Late season application can lead to one or more of the following: reduction in late season vegetative growth or regrowth after cutout or defoliation, more complete and manageable cutout, better defoliation, earlier maturity and reduction in trash and lower ginning costs. Some of these effects may favorably influence the yield potential and fiber quality. A late season application of Willowood Mepi Chlor 4.2% should be applied only if fields are not drought or nutrient stressed; that is, those fields likely to experience additional vegetative growth or regrowth. However, fields that are very rank and extremely vigorous due to a combination of poor boll load and excellent growing conditions may not respond as much as desired to late season applications at the suggested rates.

#### **Timing for Late Season Applications**

A. On fields where cotton cuts out and then starts regrowth: apply when regrowth begins, as evidenced by new leaves in the terminal and stem elongation. This would often, but not always, be in the period of 5-6 weeks after the first bloom.

B. On fields where cotton never completely cuts out, apply Willowood Mepi Chlor 4.2% when there are 4-6 nodes above the white flower (NAWF). Measure NAWF by counting the number of mainstem nodes from the first position white bloom (the one closest to the mainstem) to the terminal. Count the node with the first position white bloom as zero and the last node in the terminal, which is counted, should have a leaf at least the size of a quarter. Generally, the NAWF first reaches 4-6 during the fourth to sixth week of bloom. During this time period, the NAWF should be decreasing about one node every 5-6 days - if its rate of decrease is less, this means that the plant is not cutting out soon enough (the crop is too vigorous). If the fifth week of bloom arrives and NAWF is still above 5-6, apply Willowood Mepi Chlor 4.2%.

#### **Use Rate for Late Season Application**

Willowood Mepi Chlor 4.2% should be applied at a rate between ½ pint to 1 ½ pints per acre. Use the lower rate range on cotton with only moderate additional growth potential, and the higher rate range on fields likely to continue vigorous growth. Total seasonal use per season (early plus late application) must not exceed 3 pt/A.

#### **SPRAY VOLUMES**

Thorough coverage is required

#### **IN WATER:**

*Areas other than California:*

Ground Application - Use a minimum of 2 gal/A.

Aerial Application - Use a minimum of 2 gal/A.



*California Only:*

Ground Application - Use a minimum of 5 gal/A.

Aerial Application - Use a minimum of 5 gal/A.

**IN OIL:**

Use a minimum total oil volume of 2 pt/A for ultra low volume (ULV) aerial application.

Application in oil is permitted only in AL, AR, FL, GA, LA, MO, MS, NC, OK, SC, TN and TX. Use a nonphytotoxic oil concentrate which contains either a petroleum or vegetable oil base, contains only EPA-exempt ingredients, provides good mixing quality in the jar test (see "Compatibility" section), and has been used successfully in your locality. The oil diluent should contain emulsifiers which provide good mixing quality. If the oil does not contain an emulsifier, one must be added during mixing at a volume equal to 3% of the final volume of the mixing tank. Do not apply Willowood Mepi Chlor 4.2% as ULV without using emulsifiers. If using a vegetable oil based product, only highly refined concentrates should be used.

Mix under constant agitation. Pour one-half of the required volume of oil into the spray tank, followed by the emulsifier (if the oil does not already contain one) at approximately 3% of the final spray tank volume, and then pour in the Willowood Mepi Chlor 4.2% while the remainder of the oil is added. Constant, moderate agitation is required during and after mixing and during application.

**SPRAY DRIFT MANAGEMENT**

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- The distance of the outer most nozzles on the boom must not exceed  $\frac{3}{4}$  the length of the wingspan or rotor.
- Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they must be observed.

**AERIAL DRIFT REDUCTION ADVISORY INFORMATION**

**INFORMATION ON DROPLET SIZE:** The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

**CONTROLLING DROPLET SIZE**

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

**BOOM LENGTH:** For some use patterns, reducing the effective boom length to less than  $\frac{3}{4}$  of the wingspan or rotor length may further reduce drift without reducing swath width.

**APPLICATION HEIGHT:** Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

**SWATH ADJUSTMENT:** When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

**WIND:** Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

**TEMPERATURE AND HUMIDITY:** When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

**TEMPERATURE INVERSIONS:** Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under

low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

**SENSITIVE AREAS:** The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

#### **RAIN WASH-OFF PRECAUTION**

The use of a high quality, EPA exempt surfactant will enhance the uptake of Willowood Mepi Chlor 4.2% into the plant. Therefore, the use of a surfactant allows applications made as little as 4 hours prior to rainfall to be effective. Without a surfactant, the product should be used at least 8 hours prior to expected rainfall.

#### **COMPATIBILITY**

Willowood Mepi Chlor 4.2% is water based, and is compatible with most insecticides and miticides. If compatibility is in doubt, perform a jar test to check for compatibility. Willowood Mepi Chlor 4.2% can be used with foliar fertilizers if your prior experience shows the combination is compatible and will not injure cotton under your conditions. Caution should be used when applying with foliar fertilizers under conditions of extreme heat.

#### **RESTRICTIONS AND LIMITATIONS**

- Insect or mite damage to Willowood Mepi Chlor 4.2% treated crops can lead to yield decreases or other undesirable effects.
- Do not apply Willowood Mepi Chlor 4.2% to cotton that is under stress. If using low rate multiple applications, discontinue use until your crop has overcome any stress.
- Do not apply more than 48 fl oz of Willowood Mepi Chlor 4.2% per acre per season. The sum of all products and formulations containing mepiquat chloride must not exceed 0.132 pounds (60 grams) of mepiquat chloride per acre per season.
- Do not apply Willowood Mepi Chlor 4.2% within 30 days of harvest.
- Do not graze or feed cotton forage to livestock.
- Willowood Mepi Chlor 4.2% contains a dye and effectiveness is not related to the color of the spray solution.
- Do not tank mix with other products other than those mentioned under "COMPATIBILITY".
- Do not plant another crop within 75 days after last treatment.

#### **TIME AND RATE OF APPLICATION SHORT-STAPLE AND LONG-STAPLE (PIMA) COTTON**

Directions for use should be observed as specified below:

##### **I. HIGH RATE SINGLE OR MULTIPLE APPLICATIONS:**

Use these instructions when you are not able to start growth regulation treatments early, or when you want to make the fewest number of applications.



AREA	TIME OF APPLICATION	RATE PER ACRE
	<b>First Application</b>	<b>8 to 16 fl oz</b>
AL, AR, AZ, CA, FL, GA, LA, MO, MS, NM, NC, SC, TN, VA	Apply when cotton is actively growing and is between 20 and 30" tall, but not more than 7 days beyond early bloom (5-6 blooms per 25 row feet). Also apply if cotton is 24" tall and has no blooms.	
	<b>Second Application</b>	<b>8 to 16 fl oz</b>
	Make another application in 2 to 3 weeks if additional growth control is desired.	
	<b>Third Application for control of excessive Vegetative Growth</b>	<b>8 to 16 fl oz</b>
	If the cotton field has a history of vigorous growth apply a third application 1 to 2 weeks after the second application.	
	<b>Late Season Application</b>	<b>8 to 24 fl oz</b>
	See section titled "Late Season Application of Willowood Mepi Chlor 4.2%".	
<b>OK, TX (except Rio Grande Valley)</b>	<b>First Application</b>	<b>8 fl oz</b>
Areas without a history of excessive vegetative growth	Apply when cotton is in the early bloom stage (5-6 blooms per 25 row feet) and actively growing. Also apply if no blooms are present and the cotton is 20" tall and actively growing. See RESTRICTIONS AND LIMITATIONS	
	<b>Second Application</b>	<b>8 fl oz</b>
	Make a second application in 2 to 3 weeks if additional growth control is desired.	
	<b>Third Application</b>	<b>8 fl oz</b>
	If conditions after the second application of Willowood Mepi Chlor 4.2% continue to favor vigorous growth, apply a third application 1 to 2 weeks after the second application.	

AREA	TIME OF APPLICATION	RATE PER ACRE
OK, TX Areas with a history of excessive vegetative growth	<b>Late Season Application</b>	<b>8 to 24 fl oz</b>
	See section titled "Late Season Application of Willowood Mepi Chlor 4.2%".	
	<b>First Application</b>	<b>16 fl oz</b>
	For best results, apply when plants are in early bloom stage (5-6 blooms per 25 row feet) and an average of 24" tall. Treatments can also be made when cotton height averages a minimum of 20" and a maximum of 30" provided cotton is not more than 7 days beyond early bloom. If cotton is 24" tall and has no blooms, apply Willowood Mepi Chlor 4.2%. See RESTRICTIONS AND LIMITATIONS	
	<b>Second Application</b>	<b>8 to 16 fl oz</b>
	For fields with a history of excessive growth, or if conditions after the first application favor excessive growth, make a second application in 2 to 3 weeks.	
	<b>Third Application</b>	<b>8 to 16 fl oz</b>
	If conditions after the second application of Willowood Mepi Chlor 4.2% continue to favor vigorous growth, apply a third application 1 to 2 weeks after the second application.	
	<b>Late Season Application:</b>	<b>8 to 24 fl oz</b>
	See section titled "Late Season Application of Willowood Mepi Chlor 4.2%".	

**II. LOW-RATE MULTIPLE APPLICATIONS:**

Use these instructions when you want to maintain maximum flexibility in plant regulation treatments.

AREA	TIME OF APPLICATION	EXCESSIVE GROWTH NOT EXPECTED OR LOWER RATES HAVE WORKED IN THE PAST	EXCESSIVE GROWTH EXPECTED OR HIGHER RATES HAVE BEEN NECESSARY IN THE PAST
AL, AR, AZ, CA, FL, GA, LA, MO, MS, NC, NM, OK, SC, TN, TX, VA	<b>First Application:</b>	2 fl oz	4 fl oz
	Apply at the matchhead square <sup>1</sup> stage of growth.		
	<b>Second Application:</b>	2 fl oz	4 fl oz
	7-14 days later, or when regrowth occurs.		
	<b>Third Application</b>	2 to 4 fl oz*	4 to 8 fl oz*
	7-14 days later, or when regrowth occurs.		
	<b>Fourth Application</b>	2 to 8 fl oz*	4 to 12 fl oz*
	7-14 days later, or when regrowth occurs.		
	<b>Fifth Application</b>	4 to 8 fl oz*	4 to 12 fl oz*
	(If needed): 7-14 days later, or when regrowth occurs.		
	<b>Late Season Application:</b> See section titled "Late Season Application of Willowood Mepi Chlor 4.2%".	8 to 16 fl oz*	12 to 24 fl oz*

\*Use the higher rate if previous application was not made or if growing conditions favor excessive growth.

<sup>1</sup>Matchhead square is when the first square of a typical cotton plant is about the size of a match head (about 1/8" in diameter). Make the first application when 50% of the plants have one or more matchhead squares.

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in locked area in original container only, with lid tightly closed. Store separately from other pesticides and fertilizers, food and feed to prevent contamination. Use care to avoid puncturing container during storage or transit. In case of a spill or leaking container, call CHEMTREC at 1-800-424-9300.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:**

Rigid Non-refillable containers that are small enough to shake (i.e., with capacities less than 5 gallons or 50 lbs)

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container  $\frac{1}{4}$  full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Rigid Non-refillable containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs)

Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**Warranty and Disclaimer Statement**

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application or other unknown factors; all of which are beyond the control of Willowood USA, and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. All such risks shall be assumed by the user or buyer. Willowood USA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions. This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Willowood USA, and is subject to the inherent risks described above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, WILLOWOOD USA DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, WILLOWOOD USA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF WILLOWOOD USA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF WILLOWOOD USA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT WILLOWOOD USA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.

**Willowood Mepi Chlor 4.2%****Active Ingredient:**

\*Mepiquat Chloride: N,N-dimethylpiperidinium Chloride.....4.2%

**Other Ingredients:**.....95.8%**Total**.....100.0%

\*Contains 0.35 pounds active ingredient per gallon

**KEEP OUT OF REACH OF CHILDREN  
CAUTION - PRECAUCION**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

<b>FIRST AID</b>	
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Call poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice</li> </ul>
<b>NOTE TO PHYSICIAN:</b> No known antidote, treat symptomatically.	
<b>EMERGENCY CONTACT:</b> Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For 24-hour medical emergency assistance (human or animal) call 1-800-222-1222. For chemical emergency assistance (spill, leak, fire, or accident) call CHEMTREC at 1-800-424-9300.	

See Additional Precautionary Statements inside Booklet

EPA Reg. No. 87290-

EPA Est. No.

Net contents:

**Manufactured For:**  
Willowood USA, LLC  
1600 NW Garden Valley Blvd. Suite 120  
Roseburg, OR 97471



**PRECAUTIONARY STATEMENTS****Hazards to Humans and Domestic Animals**

**CAUTION.** Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with eyes, skin and clothing.

**PERSONAL PROTECTIVE EQUIPMENT**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance selection chart.

**Applicators and other handlers must wear:**

1. Long-sleeved shirt and long pants
2. Chemical-resistant gloves such as Nitrile, Butyl, Neoprene, and/or Barrier Laminate.
3. Shoes plus socks

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

**USER SAFETY RECOMMENDATIONS**

Users should

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

Do not apply directly to water, to areas where surface water is present or to intertidal area below the high water mark. Do not contaminate water when disposing of rinsate or equipment washwater. Do not contaminate water by cleaning of equipment or disposal of wastes.

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**DIRECTIONS FOR USE**

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It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Do not apply this product through any type of irrigation system.

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides, it contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statement on this label about personal protective equipment and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water, is:

1. Coveralls
2. Chemical resistant gloves made of any waterproof material
3. Shoes plus socks

**PRODUCT INFORMATION**

Willowood Mepi Chlor 4.2% is a foliar applied plant regulator. It allows the grower to manage the cotton plant for short-season production leading to reduced risk of yield and quality loss due to delayed and prolonged harvest. Benefits derived from the use of Willowood Mepi Chlor 4.2% include increased early boll retention and/or larger bolls, reduced plant height which provides a more open canopy, less boll rot, improved defoliation, less trash and lower ginning costs, better harvest efficiency and a darker leaf color. These benefits can provide for earlier maturity and often result in improved yields.

**Early Application of Willowood Mepi Chlor 4.2%**

Growers may use low-rate multiple applications, or higher, less frequent dosages which provide maximum flexibility under a wide range of growing conditions. Willowood Mepi Chlor 4.2% should not be applied to plants under stress. If stress is alleviated, plants should be evaluated for vegetative growth before additional applications are made. Willowood Mepi Chlor 4.2% may be tank mixed with insecticides/miticides when application timing coincides. (See RESTRICTIONS AND LIMITATIONS)

Fields should be carefully scouted. Willowood Mepi Chlor 4.2% should not be applied if plants are under any form of stress. In the absence of stress, a maximum of five low rate applications can be made each season. The first application can be applied at the matchhead square stage. The rate and timing of subsequent applications depend on growing conditions and desired benefits. Under good growing conditions, additional treatments of 2-4 fluid ounces per acre can be made at 7-14 day intervals. Higher rates of Willowood Mepi Chlor 4.2% (1/4 - 3/4 pt/A) should be used if vegetative growth becomes excessive or a greater degree of height control is desired. Do not use more than a total of 48 fl oz of Willowood Mepi Chlor 4.2% per acre in a growing season.

If significant loss of squares and/or young bolls has occurred earlier due to insect pressure or other stresses, but now these stresses have been alleviated, the need for Willowood Mepi Chlor 4.2% is increased - excess vegetative growth is likely because of poor fruit load.

#### **Late Season Application of Willowood Mepi Chlor 4.2%**

Late application of Willowood Mepi Chlor 4.2% (approximately during the fourth to sixth week of blooming) can provide certain benefits to cotton. However, it should not and does not substitute for early season use, the time of the greatest benefit from the use of Willowood Mepi Chlor 4.2%. Late season application can lead to one or more of the following: reduction in late season vegetative growth or regrowth after cutout or defoliation, more complete and manageable cutout, better defoliation, earlier maturity and reduction in trash and lower ginning costs. Some of these effects may favorably influence the yield potential and fiber quality. A late season application of Willowood Mepi Chlor 4.2% should be applied only if fields are not drought or nutrient stressed; that is, those fields likely to experience additional vegetative growth or regrowth. However, fields that are very rank and extremely vigorous due to a combination of poor boll load and excellent growing conditions may not respond as much as desired to late season applications at the suggested rates.

#### **Timing for Late Season Applications**

A. On fields where cotton cuts out and then starts regrowth: apply when regrowth begins, as evidenced by new leaves in the terminal and stem elongation. This would often, but not always, be in the period of 5-6 weeks after the first bloom.

B. On fields where cotton never completely cuts out, apply Willowood Mepi Chlor 4.2% when there are 4-6 nodes above the white flower (NAWF). Measure NAWF by counting the number of mainstem nodes from the first position white bloom (the one closest to the mainstem) to the terminal. Count the node with the first position white bloom as zero and the last node in the terminal, which is counted, should have a leaf at least the size of a quarter. Generally, the NAWF first reaches 4-6 during the fourth to sixth week of bloom. During this time period, the NAWF should be decreasing about one node every 5-6 days - if its rate of decrease is less, this means that the plant is not cutting out soon enough (the crop is too vigorous). If the fifth week of bloom arrives and NAWF is still above 5-6, apply Willowood Mepi Chlor 4.2%.

#### **Use Rate for Late Season Application**

Willowood Mepi Chlor 4.2% should be applied at a rate between ½ pint to 1 ½ pints per acre. Use the lower rate range on cotton with only moderate additional growth potential, and the higher rate range on fields likely to continue vigorous growth. Total seasonal use per season (early plus late application) must not exceed 3 pt/A.

### **SPRAY VOLUMES**

Thorough coverage is required

#### **IN WATER:**

*Areas other than California:*

Ground Application - Use a minimum of 2 gal/A.

Aerial Application - Use a minimum of 2 gal/A.

*California Only:*

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Aerial Application - Use a minimum of 5 gal/A.

**IN OIL:**

Use a minimum total oil volume of 2 pt/A for ultra low volume (ULV) aerial application.

Application in oil is permitted only in AL, AR, FL, GA, LA, MO, MS, NC, OK, SC, TN and TX. Use a nonphytotoxic oil concentrate which contains either a petroleum or vegetable oil base, contains only EPA-exempt ingredients, provides good mixing quality in the jar test (see "Compatibility" section), and has been used successfully in your locality. The oil diluent should contain emulsifiers which provide good mixing quality. If the oil does not contain an emulsifier, one must be added during mixing at a volume equal to 3% of the final volume of the mixing tank. Do not apply Willowood Mepi Chlor 4.2% as ULV without using emulsifiers. If using a vegetable oil based product, only highly refined concentrates should be used.

Mix under constant agitation. Pour one-half of the required volume of oil into the spray tank, followed by the emulsifier (if the oil does not already contain one) at approximately 3% of the final spray tank volume, and then pour in the Willowood Mepi Chlor 4.2% while the remainder of the oil is added. Constant, moderate agitation is required during and after mixing and during application.

**SPRAY DRIFT MANAGEMENT**

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- The distance of the outer most nozzles on the boom must not exceed  $\frac{3}{4}$  the length of the wingspan or rotor.
- Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they must be observed.

**AERIAL DRIFT REDUCTION ADVISORY INFORMATION**

**INFORMATION ON DROPLET SIZE:** The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).



**CONTROLLING DROPLET SIZE**

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

**BOOM LENGTH:** For some use patterns, reducing the effective boom length to less than  $\frac{3}{4}$  of the wingspan or rotor length may further reduce drift without reducing swath width.

**APPLICATION HEIGHT:** Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

**SWATH ADJUSTMENT:** When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

**WIND:** Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

**TEMPERATURE AND HUMIDITY:** When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

**TEMPERATURE INVERSIONS:** Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under

low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

**SENSITIVE AREAS:** The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

#### **RAIN WASH-OFF PRECAUTION**

The use of a high quality, EPA exempt surfactant will enhance the uptake of Willowood Mepi Chlor 4.2% into the plant. Therefore, the use of a surfactant allows applications made as little as 4 hours prior to rainfall to be effective. Without a surfactant, the product should be used at least 8 hours prior to expected rainfall.

#### **COMPATIBILITY**

Willowood Mepi Chlor 4.2% is water based, and is compatible with most insecticides and miticides. If compatibility is in doubt, perform a jar test to check for compatibility. Willowood Mepi Chlor 4.2% can be used with foliar fertilizers if your prior experience shows the combination is compatible and will not injure cotton under your conditions. Caution should be used when applying with foliar fertilizers under conditions of extreme heat.

#### **RESTRICTIONS AND LIMITATIONS**

- Insect or mite damage to Willowood Mepi Chlor 4.2% treated crops can lead to yield decreases or other undesirable effects.
- Do not apply Willowood Mepi Chlor 4.2% to cotton that is under stress. If using low rate multiple applications, discontinue use until your crop has overcome any stress.
- Do not apply more than 48 fl oz of Willowood Mepi Chlor 4.2% per acre per season. The sum of all products and formulations containing mepiquat chloride must not exceed 0.132 pounds (60 grams) of mepiquat chloride per acre per season.
- Do not apply Willowood Mepi Chlor 4.2% within 30 days of harvest.
- Do not graze or feed cotton forage to livestock.
- Willowood Mepi Chlor 4.2% contains a dye and effectiveness is not related to the color of the spray solution.
- Do not tank mix with other products other than those mentioned under "COMPATIBILITY".
- Do not plant another crop within 75 days after last treatment.

#### **TIME AND RATE OF APPLICATION SHORT-STAPLE AND LONG-STAPLE (PIMA) COTTON**

Directions for use should be observed as specified below:

##### **I. HIGH RATE SINGLE OR MULTIPLE APPLICATIONS:**

Use these instructions when you are not able to start growth regulation treatments early, or when you want to make the fewest number of applications.



AREA	TIME OF APPLICATION	RATE PER ACRE
AL, AR, AZ, CA, FL, GA, LA, MO, MS, NM, NC, SC, TN, VA	<b>First Application</b>	<b>8 to 16 fl oz</b>
	Apply when cotton is actively growing and is between 20 and 30" tall, but not more than 7 days beyond early bloom (5-6 blooms per 25 row feet). Also apply if cotton is 24" tall and has no blooms.	
	<b>Second Application</b>	<b>8 to 16 fl oz</b>
	Make another application in 2 to 3 weeks if additional growth control is desired.	
	<b>Third Application for control of excessive Vegetative Growth</b>	<b>8 to 16 fl oz</b>
	If the cotton field has a history of vigorous growth apply a third application 1 to 2 weeks after the second application.	
	<b>Late Season Application</b>	<b>8 to 24 fl oz</b>
OK, TX (except Rio Grande Valley)  Areas without a history of excessive vegetative growth	See section titled "Late Season Application of Willowood Mepi Chlor 4.2%".	
	<b>First Application</b>	<b>8 fl oz</b>
	Apply when cotton is in the early bloom stage (5-6 blooms per 25 row feet) and actively growing. Also apply if no blooms are present and the cotton is 20" tall and actively growing. See RESTRICTIONS AND LIMITATIONS	
	<b>Second Application</b>	<b>8 fl oz</b>
	Make a second application in 2 to 3 weeks if additional growth control is desired.	
	<b>Third Application</b>	<b>8 fl oz</b>
	If conditions after the second application of Willowood Mepi Chlor 4.2% continue to favor vigorous growth, apply a third application 1 to 2 weeks after the second application.	

AREA	TIME OF APPLICATION	RATE PER ACRE
OK, TX Areas with a history of excessive vegetative growth	<b>Late Season Application</b>	<b>8 to 24 fl oz</b>
	See section titled "Late Season Application of Willowood Mepi Chlor 4.2%".	
	<b>First Application</b>	<b>16 fl oz</b>
	For best results, apply when plants are in early bloom stage (5-6 blooms per 25 row feet) and an average of 24" tall. Treatments can also be made when cotton height averages a minimum of 20" and a maximum of 30" provided cotton is not more than 7 days beyond early bloom. If cotton is 24" tall and has no blooms, apply Willowood Mepi Chlor 4.2%. See RESTRICTIONS AND LIMITATIONS	
	<b>Second Application</b>	<b>8 to 16 fl oz</b>
	For fields with a history of excessive growth, or if conditions after the first application favor excessive growth, make a second application in 2 to 3 weeks.	
	<b>Third Application</b>	<b>8 to 16 fl oz</b>
	If conditions after the second application of Willowood Mepi Chlor 4.2% continue to favor vigorous growth, apply a third application 1 to 2 weeks after the second application.	
	<b>Late Season Application:</b>	<b>8 to 24 fl oz</b>
	See section titled "Late Season Application of Willowood Mepi Chlor 4.2%".	

**II. LOW-RATE MULTIPLE APPLICATIONS:**

Use these instructions when you want to maintain maximum flexibility in plant regulation treatments.

AREA	TIME OF APPLICATION	EXCESSIVE GROWTH NOT EXPECTED OR LOWER RATES HAVE WORKED IN THE PAST	EXCESSIVE GROWTH EXPECTED OR HIGHER RATES HAVE BEEN NECESSARY IN THE PAST
AL, AR, AZ, CA, FL, GA, LA, MO, MS, NC, NM, OK, SC, TN, TX, VA	<b>First Application:</b>	2 fl oz	4 fl oz
	Apply at the matchhead square <sup>1</sup> stage of growth.		
	<b>Second Application:</b>	2 fl oz	4 fl oz
	7-14 days later, or when regrowth occurs.		
	<b>Third Application</b>	2 to 4 fl oz*	4 to 8 fl oz*
	7-14 days later, or when regrowth occurs.		
	<b>Fourth Application</b>	2 to 8 fl oz*	4 to 12 fl oz*
	7-14 days later, or when regrowth occurs.		
	<b>Fifth Application</b>	4 to 8 fl oz*	4 to 12 fl oz*
	(If needed): 7-14 days later, or when regrowth occurs.		
	<b>Late Season Application:</b> See section titled "Late Season Application of Willowood Mepi Chlor 4.2%".	8 to 16 fl oz*	12 to 24 fl oz*

\*Use the higher rate if previous application was not made or if growing conditions favor excessive growth.

<sup>1</sup>Matchhead square is when the first square of a typical cotton plant is about the size of a match head (about 1/8" in diameter). Make the first application when 50% of the plants have one or more matchhead squares.



**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in locked area in original container only, with lid tightly closed. Store separately from other pesticides and fertilizers, food and feed to prevent contamination. Use care to avoid puncturing container during storage or transit. In case of a spill or leaking container, call CHEMTREC at 1-800-424-9300.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:**

Rigid Non-refillable containers that are small enough to shake (i.e., with capacities less than 5 gallons or 50 lbs)

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container  $\frac{1}{4}$  full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Rigid Non-refillable containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs)

Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**Warranty and Disclaimer Statement**

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application or other unknown factors; all of which are beyond the control of Willowood USA, and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. All such risks shall be assumed by the user or buyer. Willowood USA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions. This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Willowood USA, and is subject to the inherent risks described above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, WILLOWOOD USA DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, WILLOWOOD USA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF WILLOWOOD USA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF WILLOWOOD USA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT WILLOWOOD USA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.



United States  
**Environmental Protection Agency**  
 Washington, DC 20460  
**Formulator's Exemption Statement**  
 (40 CFR 152.85)

Applicant's Name and Address  Willowood USA LLC c/o Wagner Regulatory Associates, Inc. P.O. Box 640 Hockessin, DE 19707	EPA File Symbol/Registration Number 87290-GN
	Product Name Willowood Mepi Chlor 4.2%
	Date of Confidential Statement of Formula (EPA Form 8570-4) 01/26/2012

As an authorized representative of the applicant for registration of the product identified above, I certify that:

(1) This product contains the following active ingredient(s):

Mepiquat chloride

(2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another person and meets the requirements of 40 CFR section 158.50(e)(2) or (3).

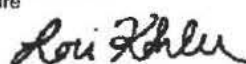
(3) Indicate by checking (A) or (B) below which paragraph applies:

☒ (A) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).

OR

☐ (B) The Confidential Statement of Formula (CSF)(EPA Form 8570-4) referenced above and on file with the EPA is complete, current, an accurate and contains the information required on the current CSF.

(4) The following active ingredients in this product qualify for the formulator's exemption.

Source		
Active Ingredient	Product Name	Registration Number
Mepiquat chloride	<div style="background-color: black; width: 100%; height: 20px;"></div> <div style="background-color: black; width: 100%; height: 20px;"></div>	<div style="background-color: black; width: 100%; height: 20px;"></div>
Signature 	Name and Title Lori Kohler, Agent	Date 01/26/2012

EPA Form 8570-27 (Rev. 06-2004)

Copy 1 - EPA  
 Copy 2 - Applicant copy

\*Product ingredient source information may be entitled to confidential treatment\*





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

OFFICE OF PESTICIDE PROGRAMS  
REGISTRATION DIVISION (7505P)

**DP BARCODE No.:** D397955 **FILE SYMBOL No.:** 87290-GN **PRODUCT NAME:**  
WILLOWOOD MEPI CHLOR 4.2% **DECISION No.:** 456355 **PC Code(s):** 109101  
**Action Code:** R300 **FOOD Use:** YES

**DATE OUT:** 01/25/12

**SUBJECT:** End Use Product Chemistry Review  
Product Name: WILLOWOOD MEPI CHLOR 4.2% *4/25/12*

**FROM:** Indira Gairola, Product Chemistry Team  
Technical Review Branch / Registration Division (7505P) *SJB 01/25/12*

**TO:** Shaunta Hill /Shaja Joyner PM 20  
Fungicide Branch/Registration Division (7505P)

**Company Name:** WILLOWOOD, LLC.  
**Formulation Type:** Fungicide

**INTRODUCTION:**

The registrant is resubmitting a revised Basic and Alternate CSF (both dated 01/11/12). The registrant submitted previously CSF for a basic formulation along with an alternate CSF both dated 11/28/11 and an application for the registration of the new end use product "WILLOWOOD MEPI CHLOR 4.2%". The CSFs dated 11/28/11 were rejected because one of the inert ingredients was not approved by the Agency. In support of the registration application, the registrant had submitted 830 series group A and group B product chemistry data with MRID No.486212-01, -02,-03 &-04. These were reviewed on 12/21/11. For details please refer to the review by Indira Gairola under Bar Code 392958. According to the registrant's letter the subject product is similar to EPA Reg. No. 66330-241.

**SUMMARY OF FINDINGS:**

1. Name of Active Ingredient(s): Mepiquat chloride (4.2%)

2. Has the registrant claimed substantial similarity to a registered product?

☒ Yes; ☐ No; ☐ NA; if yes give the registration number of the cited product.

EPA Reg. No. 66330-241

3. All of the source materials of the active ingredient are derived from registered sources- ☒ Yes ☐ No

4. All inert ingredients have been screened by IIAB and found to be approved for the proposed labeled

uses: ☐ Yes; ☒ No; ☐ NA;

5. Confidential Statement of Formula(s):

☒ Basic - Dated: - 11/28/11; Re-submitted - Dated: 01/11/12

☐ Alternate: -- Dated: 11/28/11 Re-submitted - Dated: 01/11/12

Alternate CSF Re-submitted - Dated: 01/11/12 complies with 40CFR§152.43: ☐ Yes; ☒ No; ☐ NA

6. Product label

a. Ingredient statement: Nominal concentration of AI listed on CSF(s) concurs with product label

(PR Notice 91-2).

☒ Yes; ☐ No; if not, explain below:

Is the sub statement in compliance with PR Notice 97-6 (inert ingredient vs. other ingredient)

☒ Yes; ☐ No; if not, explain below:

Metallic equivalent: ☐ Yes ☒ NA

Soluble arsenic: ☐ Yes ☒ NA

Isomeric ratios: ☐ Yes ☒ NA

Acid Equivalent: ☐ Yes ☒ NA; acid equivalent =

b. Health related sub statements: Product contains?

Petroleum distillate at > 10%: ☐ Yes ☒ No ☐ NA

Methanol at > 4%: ☐ Yes ☒ No ☐ NA

Sodium nitrate/Sodium nitrite ☐ Yes ☒ No ☐ NA

b. Physical chemical hazard statement: Product label requires a statement per 40 CFR §156.78 for: flammability, explosive potential or electric insulator breakdown?

☒ Yes; ☐ No

c.

Is the sub statement in compliance with PR Notice 98-6 (Total Release Fogger)?

☐ Yes; ☐ No; ☒ NA; if not, explain below

d. Label requires an additional Storage and Disposal statement:

☐ Yes; ☒ No; if yes explain below:

## 7. Group A: Product Chemistry Data

TRB's determination of the acceptability for the proposed product is listed in the tables below.

Guideline No.	Study Title		Data submitted		TRB's Assessment of Data	MRID Nos.
			Yes	No		
830.1550	Product Identity & Composition		X		A	486212-01; CSF 01/11/12
830.1600	Description of materials used to produce the product		X		A	" "
830.1650	Description of formulation process		X		A	" "
830.1670	Discussion on the formation of impurities		X		A	" "
830.1700	Preliminary Analysis			X	NA	
830.1750	Certified limits (158.350)	Standard certified limits	X		A. For active ingredients	486212-02
		Proposed Limits	X		A	
		Justification for wider limits	X			
830.1800	Enforcement analytical method		X		A	486212-02

A = Acceptance, N = Not Acceptable, G = Data Gap, W = Waiver Request, I = In Progress, NA = Not Applicable; U = Upgradeable.

## CONCLUSIONS:

The TRB has reviewed revised Basic and Alternate CSF (both dated 01/11/12) and the product chemistry data submitted for the proposed end-use product and has concluded that:

1. The CSF for the basic and alternate formulation (both resubmitted dated 01/11/2012) are acceptable for approved food use.
2. The data submitted data corresponding to guideline 830.1550 (product identity and composition) are acceptable.
3. The subject product is not substantially similar to EPA Reg. No. 66330-241 from product chemistry point of from product chemistry point of view for the following reasons:
  - a) density and pH value are different for the proposed and the cited product.
  - b) impurity profile for the sources of active ingredients are different
4. The proposed label was screened as it pertains to the product chemistry requirements. The final review of the proposed label and uses are the purview of the PM team.



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WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

OFFICE OF PESTICIDE PROGRAMS  
REGISTRATION DIVISION (7505P)

**DP BARCODE No.:** D395928 **FILE SYMBOL No.:** 87290-GN **PRODUCT NAME:** WILLOWOOD  
MEPI CHLOR 4.2% **DECISION No.:** 456355 **PC Code(s):** 109101 **Action Code:** R300  
**FOOD Use:** NO

**DATE OUT:** 12/21/11

**SUBJECT:** End Use Product Chemistry Review  
Product Name: ~~ARBORBIOTIC~~  
Willowood mepi chlor 4.2%

**FROM:** Indira Gairola, Product Chemistry Team  
Technical Review Branch / Registration Division (7505P)

**TO:** Shaunta Hill /Shaja Joyner PM 20  
Fungicide Branch/Registration Division (7505P)

**Company Name:** WILLOWOOD, LLC.  
**Formulation Type** Fungicide

**INTRODUCTION:**

The registrant has submitted an application for the registration of the new end use product "WILLOWOOD MEPI CHLOR 4.2%". In support of the registration application, the registrant has submitted 830 series group A and group B product chemistry data with MRID No.486212-01, -02,-03 &-04. The registrant submitted a CSF for a basic formulation (dated 10/12/2011) that was resubmitted (dated 11/28/11) along with an alternate CSF dated 11/28/11. According to the registrant's letter the subject product is similar to EPA Reg. No. 66330-241.

**SUMMARY OF FINDINGS:**

1. Name of Active Ingredient(s): Mepiquat chloride (4.2%)
2. Has the registrant claimed substantial similarity to a registered product?

[X] Yes; [ ] No; [ ] NA; if yes give the registration number of the cited product.

EPA Reg. No. 66330-241



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REGISTRATION DIVISION (7505P)

**DP BARCODE No.:** D395928 **FILE SYMBOL No.:** 87290-GN **PRODUCT NAME:** WILLOWOOD  
MEPI CHLOR 4.2% **DECISION No.:** 456355 **PC Code(s):** 109101 **Action Code:** R300  
**FOOD Use:** NO

**DATE OUT:** 12/21/11

**SUBJECT:** End Use Product Chemistry Review  
Product Name: Willowood Mepi chlor 4.2%

**FROM:** Indira Gairola, Product Chemistry Team  
Technical Review Branch / Registration Division (7505P)

**TO:** Shaunta Hill /Shaja Joyner PM 20  
Fungicide Branch/Registration Division (7505P)

**Company Name:** WILLOWOOD, LLC.  
**Formulation Type** Fungicide

**INTRODUCTION:**

The registrant has submitted an application for the registration of the new end use product "WILLOWOOD MEPI CHLOR 4.2%". In support of the registration application, the registrant has submitted 830 series group A and group B product chemistry data with MRID No.486212-01, -02,-03 &-04. The registrant submitted a CSF for a basic formulation (dated 10/12/2011) that was resubmitted (dated 11/28/11) along with an alternate CSF dated 11/28/11. According to the registrant's letter the subject product is similar to EPA Reg. No. 66330-241.

**SUMMARY OF FINDINGS:**

1. Name of Active Ingredient(s): Mepiquat chloride (4.2%)
2. Has the registrant claimed substantial similarity to a registered product?

[X] Yes; [ ] No; [ ] NA; if yes give the registration number of the cited product.

EPA Reg. No. 66330-241



3. All of the source materials of the active ingredient are derived from registered sources- ☒ Yes ☐ No
4. All inert ingredients have been screened by IIAB and found to be approved for the proposed labeled uses: ☐ Yes; ☒ No; ☐ NA;

5. Confidential Statement of Formula(s):

☒ Basic - Dated: 10/12/2001; Re-submitted - Dated: 11/28/11

☐ Alternate: ☒ NA

Alternate CSF 11/28/11 complies with 40CFR§152.43: ☐ Yes; ☒ No; ☐ NA

6. Product label

- a. Ingredient statement: Nominal concentration of AI listed on CSF(s) concurs with product label (PR Notice 91-2).  
☒ Yes; ☐ No; if not, explain below:

Is the sub statement in compliance with PR Notice 97-6 (inert ingredient vs. other ingredient)  
☒ Yes; ☐ No; if not, explain below:

Metallic equivalent: ☐ Yes ☒ NA  
Soluble arsenic: ☐ Yes ☒ NA  
Isomeric ratios: ☐ Yes ☒ NA  
Acid Equivalent: ☐ Yes ☒ NA; acid equivalent =

- b. Health related sub statements: Product contains?

Petroleum distillate at > 10%: ☐ Yes ☒ No ☐ NA  
Methanol at > 4%: ☐ Yes ☒ No ☐ NA  
Sodium nitrate/Sodium nitrite ☐ Yes ☒ No ☐ NA

- c. Physical chemical hazard statement: Product label requires a statement per 40 CFR §156.78 for: flammability, explosive potential or electric insulator breakdown?  
☒ Yes; ☐ No

Is the sub statement in compliance with PR Notice 98-6 (Total Release Fogger)?  
☐ Yes; ☐ No; ☒ NA; if not, explain below

- d. Label requires an additional Storage and Disposal statement:

☐ Yes; ☒ No; if yes explain below:

7. Group A: Product Chemistry Data

TRB's determination of the acceptability for the proposed product is listed in the tables below.

Guideline No.	Study Title		Data submitted		TRB's Assessment of Data	MRID Nos.
			Yes	No		
830.1550	Product Identity & Composition		X		N	486212-01; CSF 11/28/11
830.1600	Description of materials used to produce the product		X		A	" "
830.1650	Description of formulation process		X		A	" "
830.1670	Discussion on the formation of impurities		X		A	" "
830.1700	Preliminary Analysis			X	NA	
830.1750	Certified limits (158.350)	Standard certified limits	X		A. For active ingredients	486212-02
		Proposed Limits	X		A	
		Justification for wider limits	X			
830.1800	Enforcement analytical method		X		A	486212-02

A = Acceptance, N = Not Acceptable, G = Data Gap, W = Waiver Request, I = In Progress, NA = Not Applicable; U = Upgradeable.

8. Group B:

Guideline No.	Study Title	Value or Qualitative Description	TRB's Assessment of Data	MRID Nos.
830.6303	Physical state	Liquid	A	486212-03
830.6315	Flammability	NA (is water based)	A	486212-03
830.6316	Explodability	NA (non explosive)	A	486212-03
830.7000	pH	Data states 6.27(1% soln.) CSF states 3.93	A	486212-03
830.7300	Density/ relative density/ bulk density	Data states 0.980 g/cm <sup>3</sup> @24°C CSF states 0.940 g/cm <sup>3</sup> @24°C Clarification is required	A	486212-03

	Particle size	NA	W	486212-04
--	---------------	----	---	-----------

A = Acceptance, N = Not Acceptable, G = Data Gap, W = Waiver request, NA = Not applicable, I = In progress; U = Upgradeable.

## CONCLUSIONS:

The TRB has reviewed the product chemistry data submitted for the proposed end-use product and has concluded that:

1. The proposed CSF for the basic formulation dated 10/12/2011 (resubmitted dated 11/28/11) and alternate CSF dated 11/28/11 are unacceptable, since they contain an inert ingredient not approved for food use. Please refer to the Confidential Appendix for details.
2. The data submitted data corresponding to guideline 830.1550 (product identity and composition) are acceptable.
3. The product chemistry data submitted corresponding to guideline reference 830.1600 (description of materials used to produce the product) are acceptable.
4. The data submitted corresponding to Guideline 830.1650 (description of formulation process) satisfy the data requirements.
5. Product chemistry data corresponding to guideline 830.1670 (discussion of the formation of impurities) and 830.1800 (enforcement analytical method) are acceptable.
6. The product chemistry group B data are considered acceptable except clarification is required regarding some difference in pH and density value stated in data (MRID # 486212-03) and that stated on the CSF.
7. The subject product is substantially similar to EPA Reg. No. 66330-241 from product chemistry point of view.
8. The proposed label was screened as it pertains to the product chemistry requirements. The final review of the proposed label and uses are the purview of the PM team.
9. In (MRID # 486212-04) registrant has requested a waiver for particle size and fiber length which the Agency feels acceptable.

**Confidential Appendix**

**Name of the inert ingredient not approved for food use :**

[REDACTED]

**\*Inert ingredient information may be entitled to confidential treatment\***



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND  
POLLUTION PREVENTION

OFFICE OF PESTICIDE PROGRAMS  
REGISTRATION DIVISION (7505P)

**TECHNICAL REVIEW BRANCH  
SIMILARITY DETERMINATION**

13/DEC/2011

MEMORANDUM

Subject: Name of Pesticide Product: Willowood Mepi Chlor 4.2%  
EPA Reg. No. /File Symbol: 87290-GN  
DP Barcode: D395931  
Decision No: 456355  
Action Code: R300  
PC Code: 109101 (mepiquat chloride)

From: Eugenia McAndrew, Biologist  
Technical Review Branch  
Registration Division (7505P)

*E. McAndrew*  
*TH*

To: Shaunta Hill, RM Team 20  
Fungicide Branch  
Registration Division (7505P)

Applicant: Willowood, LLC  
c/o Wagner Regulatory Associates, Inc.  
P.O. Box 640  
Hockessin, DE 19707

FORMULATION FROM LABEL:

<u>Active Ingredient(s):</u>	<u>% by wt.</u>
Mepiquat Chloride	4.2
<u>Other Ingredient(s):</u>	<u>95.8</u>
Total:	100.0%

**ACTION REQUESTED:** The Risk Manager requests: "Please review the attached label for acceptability and similarity determination to EPA Reg. No. 66330-241."

**BACKGROUND:** Willowood, LLC has applied for registration of Willowood Mepi Chlor 4.2%, EPA File Symbol 87290-GN, claiming similarity to Mepichlor 4.2% Liquid, EPA Reg. No. 66330-241 (transferred from 51036-188). The active ingredient in both products is 4.2% mepiquat chloride. The registrant is using the cite-all method of data support to satisfy the acute toxicity data requirements. The submission includes a basic CSF dated October 12, 2011, a label and company letter.

A search of the OPP electronic databases shows that six acute toxicity studies were cited to support the reregistration of 66330-241. The studies were reviewed and discussed in two prior Product Reregistration Branch memos (Perry; D245488 and D245490; EPA Reg. Nos. 51036-188 and 51036-189; 28/APR/1998 and Perry; D247540 and D247541; EPA Reg. Nos. 51036-188 and 51036-189; 15/JUL/1998).

#### **RECOMMENDATIONS:**

1. TRB compared the basic CSFs of the proposed product, 87290-GN, and the cited product, 66330-241, and concluded that the two products are substantially similar.
2. The acute toxicity profile for the proposed product, Willowood Mepi Chlor 4.2%, EPA File Symbol 87290-GN, is as follows:

acute oral toxicity	III	cited	EPA Reg. No. 66330-241
acute dermal toxicity	III	cited	EPA Reg. No. 66330-241
acute inhalation toxicity	IV	cited	EPA Reg. No. 66330-241
primary eye irritation	III	cited	EPA Reg. No. 66330-241
primary skin irritation	IV	cited	EPA Reg. No. 66330-241
dermal sensitization	neg.	cited	EPA Reg. No. 66330-241

3. This memorandum pertains only to the decision concerning whether the subject product is similar to the cited product from an acute toxicological view point. For the purposes of this action, TRB has made no further determination of the adequacy of the toxicological data base or the precautionary label of the cited product.

4. The proposed basic CSF submitted for 87290-GN must be accepted by the TRB Product Chemistry Team.



**LABELING:** Based on the toxicity profile above, the following are the precautionary and first aid statements for this product as obtained from the Label Review System:

**PRODUCT ID #:** 087290-00030

**PRODUCT NAME:** Willowood Mepi Chlor 4.2%

**PRECAUTIONARY STATEMENTS**

**SIGNAL WORD:** CAUTION

**Hazards to Humans and Domestic Animals:**

Harmful if absorbed through skin. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wear long-sleeved shirt and long pants, socks, shoes, and gloves. [Wear protective eyewear.]\*

\*[Protective eyewear may be specified, if appropriate.]

**First Aid:**

If on skin:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

If swallowed:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to by a poison control center or doctor.
- Do not give anything to an unconscious person.

If in eyes:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.
- Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-xxx-xxxx for emergency medical treatment information.

**User Safety Recommendations:**

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.



**Willowood Mepi Chlor 4.2% (EPA File Symbol 87290-GN)**

Catherine Byrd to: Shaunta Hill, Shaja Joyner

Cc: "Lori Kohler", "James M. Wagner"

01/13/2012 09:56 AM

Good morning,

I am following up on your recent communication with Lori Kohler in our office regarding one of the inerts in the above-referenced formulation. Please find the attached revised CSFs and cover letter explaining the changes. If you have any questions or need any additional information, please do not hesitate to contact Lori Kohler or myself.

Thank you,

Catherine

Catherine M. Byrd  
*Regulatory Associate*



**WRA**

Wagner Regulatory Associates, Inc

*Please note that our address and phone numbers have changed.*

P.O. Box 640  
7217 Lancaster Pike, Suite A  
Hockessin, Delaware 19707  
P: 302.635.7283  
C: 302.766.3414  
F: 302.635.7295  
[www.wagnerreg.com](http://www.wagnerreg.com)



Willowood Mepiquat 4.2 Revised CSFs 12JAN11.pdf

January 12, 2012

Document Processing Desk  
ATTN: Shaja Joyner, PM 20  
Registration Division  
U.S. Environmental Protection Agency  
Office of Pesticide Programs (7504P)  
Room S-4900, One Potomac Yard  
2777 South Crystal Drive  
Arlington, Virginia 22202-4501



Dear Ms. Joyner,

**Subject: Revised Confidential Statement of Formula (CSF)  
Willowood Mepi Chlor 4.2% (EPA File Symbol 87290-GN)**

I am following up on the recent communication from Shaunta Hill to Lori Kohler at Wagner Regulatory Associates, Inc. (WRA) on this pending action. It was brought to our attention that a dye listed on the CSF was not cleared for food use. We apologize for this error. The EPA "inerts finder" database is available now to help us avoid this type of problem however it was not available at the time this submission was made in early October. Also we are typically informed by the 21-day front end screen personnel if there is such an issue with the inerts, but in this case we were not contacted. As you know this is one of the check list items on the 21-day screen form and it indicates that the applicant will be advised of this type of problem and given the opportunity to remove the inert or substitute it with another approved inert. I respectfully request that we now be given that opportunity.

The dye component is an extremely low percentage of this formulation at [REDACTED] I am submitting a revised basic CSF where we have replaced it with [REDACTED] which is listed in the EPA inerts finder as cleared for food. In an alternate CSF #2 we have eliminated the dye completely and made up the [REDACTED] difference with [REDACTED] These revised CSFs are enclosed and we have also submitted electronic copies of the CSFs to you by email.

If you have any questions about this submission please contact the undersigned at catherine@wagnerreg.com or (302) 635-7283.

Respectfully submitted,



Catherine M. Byrd  
Agent for Willowood USA, LLC

Enclosures

\*Inert ingredient information may be entitled to confidential treatment\*

**Fee for Service**

*W*  
{905151v~

This package includes the following

- ☒ New Registration
- ☐ Amendment

for Division

- ☐ AD
- ☐ BPPD
- ☒ RD

☒ Studies? ☒ Fee Waiver?

☐ volpay % Reduction: 47%

Risk Mgr. 20

Receipt No.

S- 905151

EPA File Symbol/Reg. No.

87290-GN

Pin-Punch Date:

10/13/2011

This item is **NOT** subject to **FFS** action.

Action Code:

Parent/Child Decisions:

Requested: R300

Granted: R300

Amount Due: \$ 1434.<sup>00</sup>

☐ Inert Cleared for Intended Use

☐ Uncleared Inert in Product

Reviewer: *[Signature]*

Date: Oct. 14, 2011

Remarks: *[Signature]*

# Completion of 21-Day Content Screen

PM- 20

EPA Reg. # (File Symbol) 87290-6N

Decision # D

Data package delivered to  
you on 10/20/11.  
(date)

Jacket/Mini-jacket will be  
transferred to you today.  
(Pick up from Document Center)

Thank you, *Kimberly*

Registration Division's 21-Day Content Team



ADMINISTRATIVE NO(S): 87290-UN

PM: 20

CHEMICAL NO.: \_\_\_\_\_

The jacket for this action can be  
requested through the JACKETS system.



## Memorandum

Date: 10 / 18 / 11

To: PM 20, Regulatory Manager

From: Information Services Branch, ITRMD

Your receipt of this data submission is not an indication that MRIDs for the enclosed studies have been posted to OPPIN.

**We expect that it will be approximately 5 days from the above date before the study-level data is available in OPPIN.**

If you have any questions about this process, please contact Teresa Downs (305-5363).

This is a: ☒ fully accepted submission  
☐ partially accepted submission  
☐ rejected submission



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
WASHINGTON, D.C. 20460

October 18, 2011

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

PYXIS REGULATORY CONSULTING, INC.  
WILLOWOOD, LLC  
4110 136TH ST., NW  
GIG HARBOR, WA 98332

**Report of Analysis for Compliance with PR Notice 86-5**

Thank you for your submittal of 13-OCT-11. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 86-5. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.

**21-Day Screen Completed by**  
**Contractor**

**21-Day Expires on** 11-3-11

**Jacket #** 87290-GN

**MRID#** 486212

**Content Screen:** Recommend to Pass/Fail

**86-5 Review:** Pass/Fail/NA

**Overall Status:** Recommend to Pass/Fail

**Transfer This Jacket to:**

STEPHEN SCHMIDT  
PM-20

## R 300 and 301

New products must provide a bridging rationale document. The bridging document directs OPP to use a currently registered set of 6 acute toxicity data and label; instead of submitting product specific data.

Guideline No.	Acute toxicity (6 pack) Study Title	Cited	
		Yes	No
870.1100	Acute Oral (LD50)	✓	
870.1200	Acute Dermal (LD50)	✓	
870.1300	Acute Inhalation (LC50)	✓	
870.2400	Acute Eye Irritation	✓	
870.2500	Acute Dermal Irritation	✓	
870.2600	Dermal Sensitization	✓	

Efficacy – which guideline depends on the proposed label use and they must cite the data to be used for the bridging rationale.

Guideline No.	Efficacy Study Titles	Cited		Comments
		Yes	No	
810.3100	Soil Treatments for Imported Fire Ants			
810.3200	Livestock, Poultry, Fur and Wool-Bearing Animal Treatments			
810.3300	Treatments to Control Pests of Humans and Pets			
810.3400	Mosquito, Black Fly, and Biting Midge (Sand Fly) Treatments			
810.3500	Premises Treatments			
810.3600	Structural Treatments			
810.3800	Methods for Efficacy Testing of Termite Baits			

# PRIA 2 – 21 Day Content Screen Review Worksheet

(EPA/OPP Use Only)

3/23/09

21 Day Screen Start Date: 10-13-11

Experts In-Processing Signature: B. R. Date 10-17-11 Fee Paid: Yes ☒

Division management contacted on issues No ☐ Yes ☐ Date \_\_\_\_\_

EPA Reg. Number: <u>87290 - GN</u>		EPA Receipt Date: <u>10-13-11</u>				
Items for Review				Yes	No	N/A*
1	Application Form (EPA Form 8570-1)(link to form) signed & complete including package type			X		
2	Confidential Statement of Formula all boxes completed, form signed, and dated (EPA Form 8570-4) (Link to form)			X		
	a) All inerts (link to <a href="http://www.epa.gov/opprd001/inerts/">http://www.epa.gov/opprd001/inerts/</a> ), including fragrances, approved for the proposed uses (see Footnote A)	yes	no			
		X				
3	Certification with Respect to Citation of Data (EPA Form 8570-34) (Link to form) completed and signed (N/A if 100% repack)			X		
	Certificate and data matrix consistent			X		
	If applicant is relying on data that are compensable, is the offer to pay statement included. (see Footnote B)	yes	no			
	If applicable, is there a letter of Authorization for exclusive use only.					
4	Formulator's Exemption Statement (EPA Form 8570-27) (Link to form) completed and signed (N/A if source is unregistered or applicant owns the technical)			X		
	Data Matrix (EPA Form 8570-35) (Link to form) both internal and external copies (PR 98-5) (Link to PR 98-5) completed and signed (N/A if 100% repack)			X		
5	a) Selective Method (Fee category experts use)	yes	no			
		X				
	b) Cite-All (Fee category experts use)					
	c) Applicant owns all data (Fee category experts use)					
6	5 Copies of Label (link to <a href="http://www.epa.gov/oppfead1/labeling/lrm/">http://www.epa.gov/oppfead1/labeling/lrm/</a> ) (Electronic labels on CD are encouraged and guidance is available)( link to <a href="http://www.epa.gov/pesticides/regulating/registering/submissions/index.htm#labels">http://www.epa.gov/pesticides/regulating/registering/submissions/index.htm#labels</a> )			X		



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

October 14, 2011

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

OPP Decision Number: D-456355  
EPA File Symbol or Registration Number: 87290-GN  
Product Name: WILLOWOOD MEPI CHLOR 4.2%  
EPA Receipt Date: 13-Oct-2011  
EPA Company Number: 87290  
Company Name: WILLOWOOD, LLC

LORI KOHLER  
WAGNER REGULATORY ASSOCIATES, INC.  
WILLOWOOD, LLC  
P.O. BOX 640  
HOCKESSIN, DE 19707

SUBJECT: Receipt of Application and 50% Small Business Waiver Request

Dear Registrant:

The Office of Pesticide Programs has received your application, 50% small business waiver request, and certification of payment. If you submitted data with this application, the results of the PRN-86-5 screen will be communicated separately. During the administrative screen, the Office of Pesticide Programs has determined that this Action is subject to a Pesticide Registration Service Fee as defined in the Pesticide Registration Improvement Act.

The Action has been identified as Action Code: R300  
NEW PRODUCT;ME-TOO PRODUCT FAST TRACK;

Your request for waiver has been forwarded for review. You will be notified in writing when a determination is made regarding your request. If your waiver request is approved, the decision review time period will start on the date of approval. If your waiver request is denied, you will receive an invoice for the outstanding balance.

If you have any questions, please contact the Pesticide Registration Service Fee Ombudsman at (703) 308-9362.

Sincerely,

A handwritten signature in black ink, appearing to be "D. J. H.", is written over the word "Sincerely,".

Front End Processing Staff  
Information Technology & Resources Management Division



# Completion of 21-Day Content Screen

PM- 20

EPA Reg. # (File Symbol) 87290-6N

Decision # D

Data package delivered to  
you on 10/20/11.  
(date)

Jacket/Mini-jacket will be  
transferred to you today.  
(Pick up from Document Center)

Thank you, *Kimmy*

Registration Division's 21-Day Content Team



ADMINISTRATIVE NO(S): 87290-6N

PM: 20

CHEMICAL NO.: \_\_\_\_\_

The jacket for this action can be  
requested through the JACKETS system.

## Memorandum

Date: 10 / 18 / 11

To: PM 20, Regulatory Manager

From: Information Services Branch, ITRMD

Your receipt of this data submission is not an indication that MRIDs for the enclosed studies have been posted to OPPIN.

**We expect that it will be approximately 5 days from the above date before the study-level data is available in OPPIN.**

If you have any questions about this process, please contact Teresa Downs (305-5363).

This is a: ☒ fully accepted submission  
☐ partially accepted submission  
☐ rejected submission



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
WASHINGTON, D.C. 20460

October 18, 2011

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

PYXIS REGULATORY CONSULTING, INC.  
WILLOWOOD, LLC  
4110 136TH ST., NW  
GIG HARBOR, WA 98332

**Report of Analysis for Compliance with PR Notice 86-5**

Thank you for your submittal of 13-OCT-11. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 86-5. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.

**21-Day Screen Completed by**  
**Contractor**

**21-Day Expires on** 11-3-11

**Jacket #** 87290-GN  
**MRID#** 486212

**Content Screen:** Recommend to Pass/Fail

**86-5 Review:** Pass/Fail/NA

**Overall Status:** Recommend to Pass/Fail

**Transfer This Jacket to:**

STEPHEN SCHTAIBLE  
PM-20

## R 300 and 301

New products must provide a bridging rationale document. The bridging document directs OPP to use a currently registered set of 6 acute toxicity data and label; instead of submitting product specific data.

Guideline No.	Acute toxicity (6 pack) Study Title	Cited	
		Yes	No
870.1100	Acute Oral (LD50)	✓	
870.1200	Acute Dermal (LD50)	✓	
870.1300	Acute Inhalation (LC50)	✓	
870.2400	Acute Eye Irritation	✓	
870.2500	Acute Dermal Irritation	✓	
870.2600	Dermal Sensitization	✓	

Efficacy - which guideline depends on the proposed label use and they must cite the data to be used for the bridging rationale.

Guideline No.	Efficacy Study Titles	Cited		Comments
		Yes	No	
810.3100	Soil Treatments for Imported Fire Ants			
810.3200	Livestock, Poultry, Fur and Wool-Bearing Animal Treatments			
810.3300	Treatments to Control Pests of Humans and Pets			
810.3400	Mosquito, Black Fly, and Biting Midge (Sand Fly) Treatments			
810.3500	Premises Treatments			
810.3600	Structural Treatments			
810.3800	Methods for Efficacy Testing of Termite Baits			



# PRIA 2 – 21 Day Content Screen Review Worksheet

(EPA/OPP Use Only)

3/23/09

21 Day Screen Start Date: 10-13-11

Experts In-Processing Signature: B. R.

Date 10-17-11

Fee Paid: Yes ☒

Division management contacted on issues No ☐ Yes ☐ Date \_\_\_\_\_

EPA Reg. Number: <u>87290 - GN</u>		EPA Receipt Date: <u>10-13-11</u>				
Items for Review				Yes	No	N/A*
1	Application Form (EPA Form 8570-1)(link to form) signed & complete including package type			<input checked="" type="checkbox"/>		
2	Confidential Statement of Formula all boxes completed, form signed, and dated (EPA Form 8570-4) (Link to form)			<input checked="" type="checkbox"/>		
	a) All inerts (link to <a href="http://www.epa.gov/oppr001/inerts/">http://www.epa.gov/oppr001/inerts/</a> ), including fragrances, approved for the proposed uses (see Footnote A)	yes	no			
		<input checked="" type="checkbox"/>				
3	Certification with Respect to Citation of Data (EPA Form 8570-34) (Link to form) completed and signed (N/A if 100% repack)			<input checked="" type="checkbox"/>		
	Certificate and data matrix consistent			<input checked="" type="checkbox"/>		
	If applicant is relying on data that are compensable, is the offer to pay statement included. (see Footnote B)	yes	no			
	If applicable, is there a letter of Authorization for exclusive use only.					
4	Formulator's Exemption Statement (EPA Form 8570-27) (Link to form) completed and signed (N/A if source is unregistered or applicant owns the technical)			<input checked="" type="checkbox"/>		
5	Data Matrix (EPA Form 8570-35) (Link to form) both internal and external copies (PR 98-5) (Link to PR 98-5) completed and signed (N/A if 100% repack)			<input checked="" type="checkbox"/>		
	a) Selective Method (Fee category experts use)	yes	no			
		<input checked="" type="checkbox"/>				
	b) Cite-All (Fee category experts use)					
	c) Applicant owns all data (Fee category experts use)					
6	5 Copies of Label (link to <a href="http://www.epa.gov/oppead1/labeling/lrm/">http://www.epa.gov/oppead1/labeling/lrm/</a> ) (Electronic labels on CD are encouraged and guidance is available)( link to <a href="http://www.epa.gov/pesticides/regulating/registering/submissions/index.htm#labels">http://www.epa.gov/pesticides/regulating/registering/submissions/index.htm#labels</a> )			<input checked="" type="checkbox"/>		

7	Is the data package consistent with PR Notice 86-5 (link to PRN 86-5)	X		
8	Notice of Filing (link to <a href="http://www.epa.gov/pesticides/regulating/tolerance_petitions.htm">http://www.epa.gov/pesticides/regulating/tolerance_petitions.htm</a> ) included with petitions (link to <a href="http://www.epa.gov/pesticides/regulating/tolerances.htm">http://www.epa.gov/pesticides/regulating/tolerances.htm</a> )			X
9	If applicable for conventional applications, reduced risk rationale (link to <a href="http://www.epa.gov/opprd001/workplan/reducedrisk.html">http://www.epa.gov/opprd001/workplan/reducedrisk.html</a> )			X
10	Required Data (link to <a href="http://www.epa.gov/pesticides/regulating/data_requirements.htm">http://www.epa.gov/pesticides/regulating/data_requirements.htm</a> ) and/or data waivers. See Footnote C.			
	a) List study (or studies) not included with application			

Comments:

- \* A.I. added.
- \* CSF approved
- \* Data Package Approved
- \* Registrant was not contacted.
- \* Jackel approved.

MPIC:486512

1K - S-4813

\* N/A – Not Applicable

Footnotes

A. During the 21 day initial content review, all CSFs will be reviewed to determine whether all inerts listed, including fragrances, are approved for the proposed uses. If an unapproved inert is identified, the applicant must either 1) resolve the inert issue by, for example, removing the inert, substituting it with an approved inert, submitting documentation that EPA approved the inert for the proposed pesticidal uses, correcting mistakes on the CSF, etc. or 2) provide the data to support OPP approval of the inert or 3) withdraw the application. Removing or substituting an inert ingredient will require a new CSF and may require submission of data. All information, forms, data and documentation resolving the inert issue must have been received by the Agency or the application withdrawn within the 21 day period, otherwise, the Agency will reject the application as described below.

To successfully complete this aspect of the 21 day initial content screen, applicants are **strongly encouraged** to verify that all inert ingredients have been approved for the application's uses **even if a product is currently registered** by consulting the inert Web

site [link to <http://www.epa.gov/opprd001/inerts/lists.html>] and if the inert is not approved, to **obtain the necessary inert approval prior to submitting an application to register a pesticide product containing that inert ingredient**. Some inert ingredients are no longer approved for food uses or certain types of uses. The name and/or CAS number on a CSF must match the name and CAS number on this web site. Simple typographical errors in the name or CAS number have resulted in processing delays.

If an inert is not listed on the inert ingredient web site and the applicant believes that the inert has been approved, the applicant should contact the Inert Ingredient Assessment Branch (IIAB) at [inertsbranch@epa.gov](mailto:inertsbranch@epa.gov) and resolve the issue. Copies of the correspondence with IIAB resolving the issue should accompany the application. All new inerts except PIP inerts are reviewed by IIAB. The IIAB should also be contacted for any questions on what supporting data needs to be submitted for and the Agency's inert review process. Questions on PIP inerts should be directed to the Chief of Microbial Pesticides Branch [Link to [http://www.epa.gov/oppbppd1/biopesticides/contacts\\_bppd.htm](http://www.epa.gov/oppbppd1/biopesticides/contacts_bppd.htm)].

When a brand, trade, or proprietary name of an inert ingredient is listed on a CSF, additional information such as an alternate name of the inert, CAS number or other information [link to <http://www.epa.gov/opprd001/inerts/tips.pdf>] must also be included to enable the Agency to determine if it has been approved. Each component of an inert mixture (including a fragrance) must be identified. In some cases, the supplier of the mixture or fragrance may need to provide this information to the Agency. Prior to the Agency's receipt of an application, applicants must arrange with a proprietary mixture or fragrance supplier to provide the component information to the Agency or promptly upon EPA's request. If the inert ingredients in a proprietary blend (including fragrances) cannot or are not identified or provided within the 21-day content review period, the Agency will reject the application.

During the 21 day content review, applicants should submit information to the individual identified by the Agency when the applicant is informed of an unapproved inert.

### **Unapproved Inerts Identified on CSFs**

#### **All applications except conventional new products and PIPs**

Once an unapproved inert is identified on a CSF, the Agency will contact the applicant with the following options:

1. Correct the application by, for instance, correcting the inert's identity or CAS number, providing documentation that the inert has been approved, or removing the unapproved inert from the CSF or replacing it with one that is approved for the application's uses; or
2. Submit the information and data needed for the Agency to approve the unapproved inert. If this option is selected and implemented, the Agency may request an extension in the PRIA decision review timeframe to accommodate the inert review/approval process;

3. Withdraw the application (the Agency retains 25% of the full fee for the fee category estimated); or

If none of these options is selected and implemented by the applicant within the 21 day content review period, the Agency will reject the application and retain 25% of the full fee of the category identified.

### Conventional New Product Applications

When the Registration Division identifies an unapproved inert on a CSF with an application for a new product that the applicant has not identified as requiring an inert approval (R311, R312 or R313), it will contact the applicant with the following options:

1. Correct the application by, for instance, correcting the inert's identity or CAS number, providing documentation that the inert has been approved, or removing the unapproved inert from the CSF or replacing it with one that is approved for the application's uses; or
2. Submit the information and data needed for the Agency to approve the unapproved inert, including any required petition to establish or amend a tolerance or exemption from a tolerance. (This option may change the PRIA category for the application, which could require a longer decision review time and a larger fee. If additional fees are due, they must be received by the Agency within the 21 day content review period.)
3. Withdraw the application (the Agency retains 25% of the full fee for the fee category estimated); or

If none of the above options is selected and implemented during the 21-day content-review period, the Agency will reject the application and retain 25% of the appropriate fee for the new product-inert approval category.

### PIP Applications

When the Biopesticide and Pollution Prevention Division identifies an unapproved inert on a PIP CSF and a request to approve the inert does not accompany the application, it will contact the applicant with the following options:

1. Correct the application by, for instance, correcting the spelling or name of the inert to that in 40 CFR 174, or providing documentation that the inert has been approved; or
2. Submit the information and data needed for the Agency to approve the unapproved inert. If an inert ingredient tolerance exemption petition is required, the petition must be received by the Agency and the B903 fee paid within the 21 day period. If this option is selected and implemented, the Agency will discuss harmonizing the timeframe for both actions.

3. Withdraw the application (the Agency retains 25% of the full fee for the fee category estimated); or

If none of the above options is selected and implemented during the 21 day content review period, the Agency will reject the application and retain 25% of the fee.

B. A policy on documentation of offers to pay is still being developed, however, for a me-too or fast track (similar/identical) new product, R300 or A530, an application without the necessary authorizations of offers to pay will be placed into either R301 or A531. The Agency recommends that authorizations of offers to pay be submitted with other PRIA applications to avoid delays in the Agency's decision.

C. Biopesticide applicants are advised to contact the Agency and discuss study waivers prior to submitting their application to the Agency. Documentation of such discussions should be submitted with the study waiver.





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

October 14, 2011

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

OPP Decision Number: D-456355  
EPA File Symbol or Registration Number: 87290-GN  
Product Name: WILLOWOOD MEPI CHLOR 4.2%  
EPA Receipt Date: 13-Oct-2011  
EPA Company Number: 87290  
Company Name: WILLOWOOD, LLC

LORI KOHLER  
WAGNER REGULATORY ASSOCIATES, INC.  
WILLOWOOD, LLC  
P.O. BOX 640  
HOCKESSIN, DE 19707

SUBJECT: Receipt of Application and 50% Small Business Waiver Request

Dear Registrant:

The Office of Pesticide Programs has received your application, 50% small business waiver request, and certification of payment. If you submitted data with this application, the results of the PRN-86-5 screen will be communicated separately. During the administrative screen, the Office of Pesticide Programs has determined that this Action is subject to a Pesticide Registration Service Fee as defined in the Pesticide Registration Improvement Act.

The Action has been identified as Action Code: R300  
NEW PRODUCT;ME-TOO PRODUCT FAST TRACK;

Your request for waiver has been forwarded for review. You will be notified in writing when a determination is made regarding your request. If your waiver request is approved, the decision review time period will start on the date of approval. If your waiver request is denied, you will receive an invoice for the outstanding balance.

If you have any questions, please contact the Pesticide Registration Service Fee Ombudsman at (703) 308-9362.

Sincerely,

A handwritten signature in black ink, appearing to read "D. J. H.", is placed below the word "Sincerely,".

Front End Processing Staff  
Information Technology & Resources Management Division

# Completion of 21-Day Content Screen

PM- 20

EPA Reg. # (File Symbol) 87290-6N

Decision # D

Data package delivered to  
you on 10/20/11.  
(date)

Jacket/Mini-jacket will be  
transferred to you today.  
(Pick up from Document Center)

Thank you, *Kimmy*

Registration Division's 21-Day Content Team



ADMINISTRATIVE NO(S): 87290-GN

PM: 20

CHEMICAL NO.: \_\_\_\_\_

The jacket for this action can be  
requested through the JACKETS system.

## Memorandum

Date: 10 / 18 / 11

To: PM 20, Regulatory Manager

From: Information Services Branch, ITRMD

Your receipt of this data submission is not an indication that MRIDs for the enclosed studies have been posted to OPPIN.

**We expect that it will be approximately 5 days from the above date before the study-level data is available in OPPIN.**

If you have any questions about this process, please contact Teresa Downs (305-5363).

This is a: ☒ fully accepted submission  
☐ partially accepted submission  
☐ rejected submission



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
WASHINGTON, D.C. 20460

October 18, 2011

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

PYXIS REGULATORY CONSULTING, INC.  
WILLOWOOD, LLC  
4110 136TH ST., NW  
GIG HARBOR, WA 98332

**Report of Analysis for Compliance with PR Notice 86-5**

Thank you for your submittal of 13-OCT-11. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 86-5. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.

**21-Day Screen Completed by**  
**Contractor**

**21-Day Expires on** 11-3-11

**Jacket #** 87290-GN  
**MRID#** 486212

**Content Screen:** Recommend to Pass/Fail

**86-5 Review:** Pass/Fail/NA

**Overall Status:** Recommend to Pass/Fail

**Transfer This Jacket to:**

STEPHEN SCHTAIBLE  
PM-20



## R 300 and 301

New products must provide a bridging rationale document. The bridging document directs OPP to use a currently registered set of 6 acute toxicity data and label; instead of submitting product specific data.

Guideline No.	Acute toxicity (6 pack) Study Title	Cited	
		Yes	No
870.1100	Acute Oral (LD50)	✓	
870.1200	Acute Dermal (LD50)	✓	
870.1300	Acute Inhalation (LC50)	✓	
870.2400	Acute Eye Irritation	✓	
870.2500	Acute Dermal Irritation	✓	
870.2600	Dermal Sensitization	✓	

Efficacy – which guideline depends on the proposed label use and they must cite the data to be used for the bridging rationale.

Guideline No.	Efficacy Study Titles	Cited		Comments
		Yes	No	
810.3100	Soil Treatments for Imported Fire Ants			
810.3200	Livestock, Poultry, Fur and Wool-Bearing Animal Treatments			
810.3300	Treatments to Control Pests of Humans and Pets			
810.3400	Mosquito, Black Fly, and Biting Midge (Sand Fly) Treatments			
810.3500	Premises Treatments			
810.3600	Structural Treatments			
810.3800	Methods for Efficacy Testing of Termite Baits			

# PRIA 2 – 21 Day Content Screen Review Worksheet

(EPA/OPP Use Only)

3/23/09

21 Day Screen Start Date: 10-13-11

Experts In-Processing Signature: B. R.

Date 10-17-11

Fee Paid: Yes ☒

Division management contacted on issues No ☐ Yes ☐ Date \_\_\_\_\_

EPA Reg. Number: <u>87290-GN</u>		EPA Receipt Date: <u>10-13-11</u>				
Items for Review				Yes	No	N/A*
1	Application Form (EPA Form 8570-1)(link to form) signed & complete including package type			<input checked="" type="checkbox"/>		
2	Confidential Statement of Formula all boxes completed, form signed, and dated (EPA Form 8570-4) (Link to form)			<input checked="" type="checkbox"/>		
	a) All inerts (link to <a href="http://www.epa.gov/opprd001/inerts/">http://www.epa.gov/opprd001/inerts/</a> ), including fragrances, approved for the proposed uses (see Footnote A)	yes	no			
		<input checked="" type="checkbox"/>				
3	Certification with Respect to Citation of Data (EPA Form 8570-34) (Link to form) completed and signed (N/A if 100% repack)			<input checked="" type="checkbox"/>		
	Certificate and data matrix consistent			<input checked="" type="checkbox"/>		
	If applicant is relying on data that are compensable, is the offer to pay statement included. (see Footnote B)	yes	no			
	If applicable, is there a letter of Authorization for exclusive use only.					
4	Formulator's Exemption Statement (EPA Form 8570-27) (Link to form) completed and signed (N/A if source is unregistered or applicant owns the technical)			<input checked="" type="checkbox"/>		
	Data Matrix (EPA Form 8570-35) (Link to form) both internal and external copies (PR 98-5) (Link to PR 98-5) completed and signed (N/A if 100% repack)			<input checked="" type="checkbox"/>		
5	a) Selective Method (Fee category experts use)	yes	no			
		<input checked="" type="checkbox"/>				
	b) Cite-All (Fee category experts use)					
	c) Applicant owns all data (Fee category experts use)					
6	5 Copies of Label (link to <a href="http://www.epa.gov/oppfead1/labeling/lrm/">http://www.epa.gov/oppfead1/labeling/lrm/</a> ) (Electronic labels on CD are encouraged and guidance is available)( link to <a href="http://www.epa.gov/pesticides/regulating/registering/submissions/index.htm#labels">http://www.epa.gov/pesticides/regulating/registering/submissions/index.htm#labels</a> )			<input checked="" type="checkbox"/>		

7	Is the data package consistent with PR Notice 86-5 (link to PRN 86-5)	X		
8	Notice of Filing (link to <a href="http://www.epa.gov/pesticides/regulating/tolerance_petitions.htm">http://www.epa.gov/pesticides/regulating/tolerance_petitions.htm</a> ) included with petitions (link to <a href="http://www.epa.gov/pesticides/regulating/tolerances.htm">http://www.epa.gov/pesticides/regulating/tolerances.htm</a> )			X
9	If applicable for conventional applications, reduced risk rationale (link to <a href="http://www.epa.gov/opprd001/workplan/reducedrisk.html">http://www.epa.gov/opprd001/workplan/reducedrisk.html</a> )			X
10	Required Data (link to <a href="http://www.epa.gov/pesticides/regulating/data_requirements.htm">http://www.epa.gov/pesticides/regulating/data_requirements.htm</a> ) and/or data waivers. See Footnote C.			
	a) List study (or studies) not included with application			

Comments:

- \* A.I. added.
- \* CSF approved
- \* Data Package Approved
- \* Registrant was not contacted.
- \* Jacket approved.

MRID: 36612

IK - S-4813

\* N/A – Not Applicable

Footnotes

A. During the 21 day initial content review, all CSFs will be reviewed to determine whether all inerts listed, including fragrances, are approved for the proposed uses. If an unapproved inert is identified, the applicant must either 1) resolve the inert issue by, for example, removing the inert, substituting it with an approved inert, submitting documentation that EPA approved the inert for the proposed pesticidal uses, correcting mistakes on the CSF, etc. or 2) provide the data to support OPP approval of the inert or 3) withdraw the application. Removing or substituting an inert ingredient will require a new CSF and may require submission of data. All information, forms, data and documentation resolving the inert issue must have been received by the Agency or the application withdrawn within the 21 day period, otherwise, the Agency will reject the application as described below.

To successfully complete this aspect of the 21 day initial content screen, applicants are **strongly encouraged** to verify that all inert ingredients have been approved for the application's uses **even if a product is currently registered** by consulting the inert Web

site [link to <http://www.epa.gov/opprd001/inerts/lists.html>] and if the inert is not approved, to **obtain the necessary inert approval prior to submitting an application to register a pesticide product containing that inert ingredient**. Some inert ingredients are no longer approved for food uses or certain types of uses. The name and/or CAS number on a CSF must match the name and CAS number on this web site. Simple typographical errors in the name or CAS number have resulted in processing delays.

If an inert is not listed on the inert ingredient web site and the applicant believes that the inert has been approved, the applicant should contact the Inert Ingredient Assessment Branch (IIAB) at [inertsbranch@epa.gov](mailto:inertsbranch@epa.gov) and resolve the issue. Copies of the correspondence with IIAB resolving the issue should accompany the application. All new inerts except PIP inerts are reviewed by IIAB. The IIAB should also be contacted for any questions on what supporting data needs to be submitted for and the Agency's inert review process. Questions on PIP inerts should be directed to the Chief of Microbial Pesticides Branch [Link to [http://www.epa.gov/oppbppd1/biopesticides/contacts\\_bppd.htm](http://www.epa.gov/oppbppd1/biopesticides/contacts_bppd.htm)].

When a brand, trade, or proprietary name of an inert ingredient is listed on a CSF, additional information such as an alternate name of the inert, CAS number or other information [link to <http://www.epa.gov/opprd001/inerts/tips.pdf>] must also be included to enable the Agency to determine if it has been approved. Each component of an inert mixture (including a fragrance) must be identified. In some cases, the supplier of the mixture or fragrance may need to provide this information to the Agency. Prior to the Agency's receipt of an application, applicants must arrange with a proprietary mixture or fragrance supplier to provide the component information to the Agency or promptly upon EPA's request. If the inert ingredients in a proprietary blend (including fragrances) cannot or are not identified or provided within the 21-day content review period, the Agency will reject the application.

During the 21 day content review, applicants should submit information to the individual identified by the Agency when the applicant is informed of an unapproved inert.

### **Unapproved Inerts Identified on CSFs**

#### **All applications except conventional new products and PIPs**

Once an unapproved inert is identified on a CSF, the Agency will contact the applicant with the following options:

1. Correct the application by, for instance, correcting the inert's identity or CAS number, providing documentation that the inert has been approved, or removing the unapproved inert from the CSF or replacing it with one that is approved for the application's uses; or
2. Submit the information and data needed for the Agency to approve the unapproved inert. If this option is selected and implemented, the Agency may request an extension in the PRIA decision review timeframe to accommodate the inert review/approval process;

3. Withdraw the application (the Agency retains 25% of the full fee for the fee category estimated); or

If none of these options is selected and implemented by the applicant within the 21 day content review period, the Agency will reject the application and retain 25% of the full fee of the category identified.

#### Conventional New Product Applications

When the Registration Division identifies an unapproved inert on a CSF with an application for a new product that the applicant has not identified as requiring an inert approval (R311, R312 or R313), it will contact the applicant with the following options:

1. Correct the application by, for instance, correcting the inert's identity or CAS number, providing documentation that the inert has been approved, or removing the unapproved inert from the CSF or replacing it with one that is approved for the application's uses; or
2. Submit the information and data needed for the Agency to approve the unapproved inert, including any required petition to establish or amend a tolerance or exemption from a tolerance. (This option may change the PRIA category for the application, which could require a longer decision review time and a larger fee. If additional fees are due, they must be received by the Agency within the 21 day content review period.)
3. Withdraw the application (the Agency retains 25% of the full fee for the fee category estimated); or

If none of the above options is selected and implemented during the 21-day content-review period, the Agency will reject the application and retain 25% of the appropriate fee for the new product-inert approval category.

#### PIP Applications

When the Biopesticide and Pollution Prevention Division identifies an unapproved inert on a PIP CSF and a request to approve the inert does not accompany the application, it will contact the applicant with the following options:

1. Correct the application by, for instance, correcting the spelling or name of the inert to that in 40 CFR 174, or providing documentation that the inert has been approved; or
2. Submit the information and data needed for the Agency to approve the unapproved inert. If an inert ingredient tolerance exemption petition is required, the petition must be received by the Agency and the B903 fee paid within the 21 day period. If this option is selected and implemented, the Agency will discuss harmonizing the timeframe for both actions.



3. Withdraw the application (the Agency retains 25% of the full fee for the fee category estimated); or

If none of the above options is selected and implemented during the 21 day content review period, the Agency will reject the application and retain 25% of the fee.

B. A policy on documentation of offers to pay is still being developed, however, for a me-too or fast track (similar/identical) new product, R300 or A530, an application without the necessary authorizations of offers to pay will be placed into either R301 or A531. The Agency recommends that authorizations of offers to pay be submitted with other PRIA applications to avoid delays in the Agency's decision.

C. Biopesticide applicants are advised to contact the Agency and discuss study waivers prior to submitting their application to the Agency. Documentation of such discussions should be submitted with the study waiver.

# Completion of 21-Day Content Screen

PM- 20

EPA Reg. # (File Symbol) 87290-6N

Decision # D

Data package delivered to  
you on 10/20/11.  
(date)

Jacket/Mini-jacket will be  
transferred to you today.  
(Pick up from Document Center)

Thank you, *Kim*

Registration Division's 21-Day Content Team



ADMINISTRATIVE NO(S).: 87290-GN

PM: 20

CHEMICAL NO.: \_\_\_\_\_

The jacket for this action can be  
requested through the JACKETS system.

## Memorandum

Date: 10 / 18 / 11

To: PM 20, Regulatory Manager

From: Information Services Branch, ITRMD

Your receipt of this data submission is not an indication that MRIDs for the enclosed studies have been posted to OPPIN.

**We expect that it will be approximately 5 days from the above date before the study-level data is available in OPPIN.**

If you have any questions about this process, please contact Teresa Downs (305-5363).

This is a: ☒ fully accepted submission  
☐ partially accepted submission  
☐ rejected submission



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
WASHINGTON, D.C. 20460

October 18, 2011

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

PYXIS REGULATORY CONSULTING, INC.  
WILLOWOOD, LLC  
4110 136TH ST., NW  
GIG HARBOR, WA 98332

Report of Analysis for Compliance with PR Notice 86-5

Thank you for your submittal of 13-OCT-11. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 86-5. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.

# Receipt for Section 3

S: 805151

Resubmission: ☐ Yes ☒ No

Regulatory Type: Product Registration - Section 3

Fee For Service: ☒ Yes ☐ No

Application Type: New Registration

Billable: ☒ Yes ☐ No

Company: 87290 WILLOWOOD, LLC

V

Risk Manager: Registration Division, Risk Management Team 20

Product #: 07290-GN Product Name: WILLOWOOD MEPI CHLOR 4.2%

Quantity:

Me Too Section 3: 88330-241 Me Too Product Name: MEPICHLOR 4.2% LIQUID

Application Date: 12-Oct-2011 ☒ OPP Rec'd Date: 13-Oct-2011 ☒

Front End Date: 13-Oct-2011 ☒ Risk Manager Send Date: ☒

FFS Due Date: Negotiated Due Date:

OPP Target Date:

Fast Track: ☐ New Ingredient: ☐

Receipt Description:

New registration

Form A: ☐ Signature Date:

Form B: ☐ Signature Date:

Print Letter

Enter More Information

Tracking

Receipt Content

Study

CSF

View/Edit

New Ingredient Request Date:

New Ingredient Received Date:

Signature Date:



**21-Day Screen Completed by**  
**Contractor**

**21-Day Expires on** 11-3-11

**Jacket #** 87290-GN  
**MRID#** 486212

**Content Screen:** Recommend to Pass/Fail

**86-5 Review:** Pass/Fail/NA

**Overall Status:** Recommend to Pass/Fail

**Transfer This Jacket to:**

STEPHEN SCHTAIBLE

PM-20

## R 300 and 301

New products must provide a bridging rationale document. The bridging document directs OPP to use a currently registered set of 6 acute toxicity data and label; instead of submitting product specific data.

Guideline No.	Acute toxicity (6 pack) Study Title	Cited	
		Yes	No
870.1100	Acute Oral (LD50)	✓	
870.1200	Acute Dermal (LD50)	✓	
870.1300	Acute Inhalation (LC50)	✓	
870.2400	Acute Eye Irritation	✓	
870.2500	Acute Dermal Irritation	✓	
870.2600	Dermal Sensitization	✓	

Efficacy - which guideline depends on the proposed label use and they must cite the data to be used for the bridging rationale.

Guideline No.	Efficacy Study Titles	Cited		Comments
		Yes	No	
810.3100	Soil Treatments for Imported Fire Ants			
810.3200	Livestock, Poultry, Fur and Wool-Bearing Animal Treatments			
810.3300	Treatments to Control Pests of Humans and Pets			
810.3400	Mosquito, Black Fly, and Biting Midge (Sand Fly) Treatments			
810.3500	Premises Treatments			
810.3600	Structural Treatments			
810.3800	Methods for Efficacy Testing of Termite Baits			

# PRIA 2 – 21 Day Content Screen Review Worksheet

(EPA/OPP Use Only)

3/23/09

21 Day Screen Start Date: 10-13-11

Experts In-Processing Signature: B. 2

Date 10-17-11

Fee Paid: Yes ☒

Division management contacted on issues No ☐ Yes ☐ Date \_\_\_\_\_

EPA Reg. Number: <u>87290 - GN</u>		EPA Receipt Date: <u>10-13-11</u>												
Items for Review				Yes	No	N/A*								
1	<b>Application Form</b> (EPA Form 8570-1)(link to form) signed & complete including package type			<input checked="" type="checkbox"/>										
2	<b>Confidential Statement of Formula</b> all boxes completed, form signed, and dated (EPA Form 8570-4) (Link to form) a) All inerts (link to <a href="http://www.epa.gov/oppr001/inerts/">http://www.epa.gov/oppr001/inerts/</a> ), including fragrances, approved for the proposed uses (see Footnote A)			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">yes</th> <th style="width: 50%;">no</th> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td></td> </tr> </table>	yes	no	<input checked="" type="checkbox"/>							
yes	no													
<input checked="" type="checkbox"/>														
3	<b>Certification with Respect to Citation of Data</b> (EPA Form 8570-34) (Link to form) completed and signed (N/A if 100% repack)			<input checked="" type="checkbox"/>										
	Certificate and data matrix consistent			<input checked="" type="checkbox"/>										
	If applicant is relying on data that are compensable, is the offer to pay statement included. (see Footnote B)			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">yes</th> <th style="width: 50%;">no</th> </tr> <tr> <td></td> <td></td> </tr> </table>	yes	no								
yes	no													
	If applicable, is there a letter of Authorization for exclusive use only.													
4	<b>Formulator's Exemption Statement</b> (EPA Form 8570-27) (Link to form) completed and signed (N/A if source is unregistered or applicant owns the technical)			<input checked="" type="checkbox"/>										
5	<b>Data Matrix</b> (EPA Form 8570-35) (Link to form) both internal and external copies (PR 98-5) (Link to PR 98-5) completed and signed (N/A if 100% repack) a) Selective Method (Fee category experts use) b) Cite-All (Fee category experts use) c) Applicant owns all data (Fee category experts use)			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">yes</th> <th style="width: 50%;">no</th> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </table>	yes	no	<input checked="" type="checkbox"/>							
yes	no													
<input checked="" type="checkbox"/>														
6	<b>5 Copies of Label</b> (link to <a href="http://www.epa.gov/oppead1/labeling/lrm/">http://www.epa.gov/oppead1/labeling/lrm/</a> ) (Electronic labels on CD are encouraged and guidance is available)( link to <a href="http://www.epa.gov/pesticides/regulating/registering/submissions/index.htm#labels">http://www.epa.gov/pesticides/regulating/registering/submissions/index.htm#labels</a> )			<input checked="" type="checkbox"/>										

7	Is the data package consistent with PR Notice 86-5 (link to PRN 86-5)	X		
8	Notice of Filing (link to <a href="http://www.epa.gov/pesticides/regulating/tolerance_petitions.htm">http://www.epa.gov/pesticides/regulating/tolerance_petitions.htm</a> ) included with petitions (link to <a href="http://www.epa.gov/pesticides/regulating/tolerances.htm">http://www.epa.gov/pesticides/regulating/tolerances.htm</a> )			X
9	If applicable for conventional applications, reduced risk rationale (link to <a href="http://www.epa.gov/opprd001/workplan/reducedrisk.html">http://www.epa.gov/opprd001/workplan/reducedrisk.html</a> )			X
10	Required Data (link to <a href="http://www.epa.gov/pesticides/regulating/data_requirements.htm">http://www.epa.gov/pesticides/regulating/data_requirements.htm</a> ) and/or data waivers. See Footnote C.			
	a) List study (or studies) not included with application			



Comments:

- \* A.T. added.
- . CSF approved
- \* Data Package Approved
- \* Registrant was not contacted.
- \* Jacket approved.

. MPIL: 4865.12

IK - S-4813

\* N/A - Not Applicable

Footnotes

A. During the 21 day initial content review, all CSFs will be reviewed to determine whether all inerts listed, including fragrances, are approved for the proposed uses. If an unapproved inert is identified, the applicant must either 1) resolve the inert issue by, for example, removing the inert, substituting it with an approved inert, submitting documentation that EPA approved the inert for the proposed pesticidal uses, correcting mistakes on the CSF, etc. or 2) provide the data to support OPP approval of the inert or 3) withdraw the application. Removing or substituting an inert ingredient will require a new CSF and may require submission of data. All information, forms, data and documentation resolving the inert issue must have been received by the Agency or the application withdrawn within the 21 day period, otherwise, the Agency will reject the application as described below.

To successfully complete this aspect of the 21 day initial content screen, applicants are **strongly encouraged** to verify that all inert ingredients have been approved for the application's uses **even if a product is currently registered** by consulting the inert Web

site [link to <http://www.epa.gov/opprd001/inerts/lists.html>] and if the inert is not approved, to **obtain the necessary inert approval prior to submitting an application to register a pesticide product containing that inert ingredient**. Some inert ingredients are no longer approved for food uses or certain types of uses. The name and/or CAS number on a CSF must match the name and CAS number on this web site. Simple typographical errors in the name or CAS number have resulted in processing delays.

If an inert is not listed on the inert ingredient web site and the applicant believes that the inert has been approved, the applicant should contact the Inert Ingredient Assessment Branch (IIAB) at [inertsbranch@epa.gov](mailto:inertsbranch@epa.gov) and resolve the issue. Copies of the correspondence with IIAB resolving the issue should accompany the application. All new inerts except PIP inerts are reviewed by IIAB. The IIAB should also be contacted for any questions on what supporting data needs to be submitted for and the Agency's inert review process. Questions on PIP inerts should be directed to the Chief of Microbial Pesticides Branch [Link to [http://www.epa.gov/oppbppd1/biopesticides/contacts\\_bppd.htm](http://www.epa.gov/oppbppd1/biopesticides/contacts_bppd.htm)].

When a brand, trade, or proprietary name of an inert ingredient is listed on a CSF, additional information such as an alternate name of the inert, CAS number or other information [link to <http://www.epa.gov/opprd001/inerts/tips.pdf>] must also be included to enable the Agency to determine if it has been approved. Each component of an inert mixture (including a fragrance) must be identified. In some cases, the supplier of the mixture or fragrance may need to provide this information to the Agency. Prior to the Agency's receipt of an application, applicants must arrange with a proprietary mixture or fragrance supplier to provide the component information to the Agency or promptly upon EPA's request. If the inert ingredients in a proprietary blend (including fragrances) cannot or are not identified or provided within the 21-day content review period, the Agency will reject the application.

During the 21 day content review, applicants should submit information to the individual identified by the Agency when the applicant is informed of an unapproved inert.

### **Unapproved Inerts Identified on CSFs**

#### **All applications except conventional new products and PIPs**

Once an unapproved inert is identified on a CSF, the Agency will contact the applicant with the following options:

1. Correct the application by, for instance, correcting the inert's identity or CAS number, providing documentation that the inert has been approved, or removing the unapproved inert from the CSF or replacing it with one that is approved for the application's uses; or
2. Submit the information and data needed for the Agency to approve the unapproved inert. If this option is selected and implemented, the Agency may request an extension in the PRIA decision review timeframe to accommodate the inert review/approval process;

3. Withdraw the application (the Agency retains 25% of the full fee for the fee category estimated); or

If none of these options is selected and implemented by the applicant within the 21 day content review period, the Agency will reject the application and retain 25% of the full fee of the category identified.

#### Conventional New Product Applications

When the Registration Division identifies an unapproved inert on a CSF with an application for a new product that the applicant has not identified as requiring an inert approval (R311, R312 or R313), it will contact the applicant with the following options:

1. Correct the application by, for instance, correcting the inert's identity or CAS number, providing documentation that the inert has been approved, or removing the unapproved inert from the CSF or replacing it with one that is approved for the application's uses; or
2. Submit the information and data needed for the Agency to approve the unapproved inert, including any required petition to establish or amend a tolerance or exemption from a tolerance. (This option may change the PRIA category for the application, which could require a longer decision review time and a larger fee. If additional fees are due, they must be received by the Agency within the 21 day content review period.)
3. Withdraw the application (the Agency retains 25% of the full fee for the fee category estimated); or

If none of the above options is selected and implemented during the 21-day content-review period, the Agency will reject the application and retain 25% of the appropriate fee for the new product-inert approval category.

#### PIP Applications

When the Biopesticide and Pollution Prevention Division identifies an unapproved inert on a PIP CSF and a request to approve the inert does not accompany the application, it will contact the applicant with the following options:

1. Correct the application by, for instance, correcting the spelling or name of the inert to that in 40 CFR 174, or providing documentation that the inert has been approved; or
2. Submit the information and data needed for the Agency to approve the unapproved inert. If an inert ingredient tolerance exemption petition is required, the petition must be received by the Agency and the B903 fee paid within the 21 day period. If this option is selected and implemented, the Agency will discuss harmonizing the timeframe for both actions.



3. Withdraw the application (the Agency retains 25% of the full fee for the fee category estimated); or

If none of the above options is selected and implemented during the 21 day content review period, the Agency will reject the application and retain 25% of the fee.

B. A policy on documentation of offers to pay is still being developed, however, for a me-too or fast track (similar/identical) new product, R300 or A530, an application without the necessary authorizations of offers to pay will be placed into either R301 or A531. The Agency recommends that authorizations of offers to pay be submitted with other PRIA applications to avoid delays in the Agency's decision.

C. Biopesticide applicants are advised to contact the Agency and discuss study waivers prior to submitting their application to the Agency. Documentation of such discussions should be submitted with the study waiver.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

October 14, 2011

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

OPP Decision Number: D-456355  
EPA File Symbol or Registration Number: 87290-GN  
Product Name: WILLOWOOD MEPI CHLOR 4.2%  
EPA Receipt Date: 13-Oct-2011  
EPA Company Number: 87290  
Company Name: WILLOWOOD, LLC

LORI KOHLER  
WAGNER REGULATORY ASSOCIATES, INC.  
WILLOWOOD, LLC  
P.O. BOX 640  
HOCKESSIN, DE 19707

SUBJECT: Receipt of Application and 50% Small Business Waiver Request

Dear Registrant:

The Office of Pesticide Programs has received your application, 50% small business waiver request, and certification of payment. If you submitted data with this application, the results of the PRN-86-5 screen will be communicated separately. During the administrative screen, the Office of Pesticide Programs has determined that this Action is subject to a Pesticide Registration Service Fee as defined in the Pesticide Registration Improvement Act.

The Action has been identified as Action Code: R300  
NEW PRODUCT;ME-TOO PRODUCT FAST TRACK;

Your request for waiver has been forwarded for review. You will be notified in writing when a determination is made regarding your request. If your waiver request is approved, the decision review time period will start on the date of approval. If your waiver request is denied, you will receive an invoice for the outstanding balance.

If you have any questions, please contact the Pesticide Registration Service Fee Ombudsman at (703) 308-9362.

Sincerely,

A handwritten signature in black ink, appearing to read "D. J. H.", is placed over the typed name of the Front End Processing Staff member.

Front End Processing Staff  
Information Technology & Resources Management Division

# Receipt for Section 3

S: 905151

Resubmission: ☐ Yes ☒ No

Regulatory Type: Product Registration - Section 3

Fee For Service: ☒ Yes ☐ No

Application Type: New Registration

Billable: ☒ Yes ☐ No

Company: 87290 WILLOWOOD, LLC V

Risk Manager: Registration Division, Risk Management Team 20

Product #: 87290-GN Product Name: WILLOWOOD MEPI CHLOR 4.2%

Overseer:

Me Too Section3: 66330-241 Me Too Product Name: MEPICHLOR 4.2% LIQUID

Application Date: 12-Oct-2011 lid

OPP Rec'd Date: 13-Oct-2011 lid

Front End Date: 13-Oct-2011 lid

Risk Manager Send Date:

FFS Due Date:

Negotiated Due Date:

OPP Target Date:

Full Track: ☐

New Ingredient: ☐

Receipt Description:

New registration

Form A: ☐

Signature Date:

Form B: ☐

Signature Date:

Print Letter

Enter More Information

Tracking

Receipt Content

Study

CSF

View/Edit

New Ingredient

Request Date:

New Ingredient

Received Date:

## Online Payment

## Step 3: Confirm Payment

1 | 2 | 3

Thank you.

Your transaction has been successfully completed.

## Pay.gov Tracking Information

Application Name: PRIA Service Fees

Pay.gov Tracking ID: 254LR9QM

Agency Tracking ID: 74245318487

Transaction Date and Time: 10/12/2011 16:59 EDT

## Payment Summary

## Address Information

Account Holder Name: Brian Heinze  
1600 NW Garden  
Billing Address: Valley Blvd  
Billing Address 2: Suite 120  
City: Roseburg  
State / Province: OR  
Zip / Postal Code: 97471  
Country: USA

## Account Information

Card Type: Master Card  
Card Number: \*\*\*\*\*6005  
Decision Number:  
Registration Number:  
Willowood USA  
Company Name: LLC  
Company Number: 87290  
Action Code: R300

## Payment Information

Payment Amount: \$717.00  
Transaction Date 10/12/2011  
and Time: 16:59 EDT



**WILLOWOOD USA**

Your preferred manufacturer of post patent products

August 31, 2010

To: Whom it May Concern

Re: Designation of Agent for:  
**Willowood USA, LLC**  
1600 NW Garden Valley Blvd.  
Suite 130  
Roseburg, OR 97471

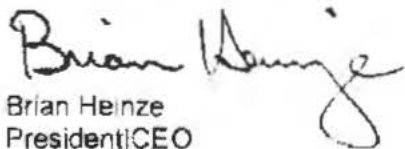
Dear Sir or Madam:

This letter serves as notification that Willowood USA, LLC has appointed Wagner Regulatory Associates, Inc. (WRA, Inc.) to serve as the Agent on our company's behalf regarding all state and federal regulatory matters relative to products that Willowood USA, LLC will register with US EPA and the states. Please forward all correspondence for our company and its products to:

Wagner Regulatory Associates, Inc.  
P.O. Box 640  
Hockessin, DE 19707-0640

Thank you for your time and assistance. Please feel free to call me at if you have any questions.

Respectfully submitted,

  
Brian Heinze  
President/CEO

cc: WRA, Inc.



United States  
Environmental Protection Agency  
Washington, DC 20460

<input checked="" type="checkbox"/> Registration	OPP Identifier Number
<input type="checkbox"/> Amendment	
<input type="checkbox"/> Other	

### Application for Pesticide - Section I

1. Company/Product Number 87290- <u>GN</u>	2. EPA Product Manager Shaja Joyner	3. Proposed Classification  <input checked="" type="checkbox"/> None      Restricted
4. Company/Product (Name) Willowood USA, LLC/Willowood Mepi Chlor 4.2%	PM# 20	
5. Name and Address of Applicant (Include Zip Code)  Willowood USA, LLC c/o Wagner Regulatory Associates, Inc. P.O. Box 640 Hockessin, DE 19707 <input type="checkbox"/> Check if this is a new address		6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(I), my product is similar or identical in composition and labeling to: EPA Reg. No. 66330-241  Product Name: Mepichlor 4.2% Liquid

### Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input checked="" type="checkbox"/> "Me Too" Application.
<input type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

**Explanation:** Use additional page(s) if necessary. (For Section I and Section II.)

### Section - III

1. Material This Product Will Be Packaged In:			
Child-Resistant Packaging <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If "Yes"      No per Unit Packaging wgt.      container	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If "Yes"      No per Package wgt      container	2. Type of Container <input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) HDPE lined bags
* Certification must be submitted			
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container	4. Size(s) Retail Container 2.5 gallons	5. Location of Label Directions <input type="checkbox"/> On Label <input checked="" type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled		<input type="checkbox"/> Other _____	

### Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Lori Kohler	Title Agent for Willowood USA, LLC	Telephone No. (Include Area Code) (302) 635-7281
<b>Certification</b> I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received  (Stamped)
2. Signature 	3. Title Agent for Willowood USA, LLC	
4. Typed Name Lori Kohler	October 12, 2011	



October 12, 2011

Document Processing Desk (REGFEE)  
ATTN: Shaja Joyner, PM 20  
Registration Division  
U.S. Environmental Protection Agency  
Office of Pesticide Programs (7504P)  
Room S-4900, One Potomac Yard  
2777 South Crystal Drive  
Arlington, Virginia 22202-4501



Dear Ms. Joyner,

**Subject: Application to register a new end-use product containing a currently registered active ingredient - "Willowood Mepi Chlor 4.2%"**

Wagner Regulatory Associates, Inc., as agent for Willowood USA, LLC (EPA Company Number 87290), is requesting registration of the above referenced product. This product is substantially similar to the mepiquat chloride product (Mepichlor 4.2% Liquid) registered by Arysta LifeScience North America, LLC under EPA Registration Number 66330-241

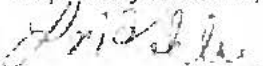
In support of this request, the following documents and studies are attached:

- Letter from Willowood USA, LLC appointing Wagner Regulatory Associates, Inc. as its agent
- Application for Pesticide Registration (8570-1)
- Confidential Statement of Formula (8570-4), 2 copies
- Certification with Respect to Citation of Data (8570-34)
- Formulator's Exemption Statement (8570-27)
- Data Matrix (8570-35)
- Data Transmittal Document
- Product Identity and Composition data (3 copies) as outlined in the transmittal document
- Physical and Chemical Properties data (3 copies) as outlined in the transmittal document
- Draft labeling, 3 copies and CD
- Certification with Respect to Label Integrity
- A copy of the EPA approved label for EPA Reg. No. 66330-241 and
- A copy of the receipt confirming payment of the required registration fees.

Willowood USA, LLC has been granted a 50% waiver for previous submissions in 2011 (see attached email). Willowood USA, LLC has submitted 50% of the required payment to U.S.EPA in accordance with PRIA II Fee Table - FY11/FY12, for action category R300 - \$717.00.

If you have any questions about this submission please contact the undersigned at [Lori@wagnerreg.com](mailto:Lori@wagnerreg.com) or (302) 635-7281.

Respectfully submitted,



Lori Kohler  
Agent for Willowood USA, LLC

Enclosures

## DATA TRANSMITTAL DOCUMENT

1. Name and Address of Submitter

Willowood LLC  
c/o Wagner Regulatory Associates  
PO Box 640  
Hockessin, DE 19707

2. Regulatory Action In Support Of Which This Package Is Submitted

Application for Registration  
Willowood Mepi Chlor 4.2%

3. Transmittal Date

October 12, 2011

4. List of Submitted Studies

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Vol. 1: Wagner Regulatory Associates, Inc. (2011) Willowood Mepi Chlor 4.2% Product Chemistry - Product Identity and Composition, Description of Materials Used to Produce the Product, Description of the Production Process, Description of the Formulation Process, and Discussion of Formation of Impurities. Willowood USA, LLC, Roseburg, OR. Non-confidential portion 6 pages, Confidential portion 22 pages.

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Vol. 2: Wagner Regulatory Associates, Inc. (2011) Willowood Mepi Chlor 4.2% Preliminary Analysis, Certified Limits and Enforcement Analytical Method. Willowood USA, LLC, Roseburg, OR. Non-confidential portion 6 pages, Confidential portion 16 pages.

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Vol. 3: Johnson, Lisa (2011) Willowood Mepiquat Chloride 4.2% Product Chemistry Series B - Product Properties: Color, Physical State, Odor, Oxidation/Reduction, Chemical Incompatibility, pH, Viscosity, and Density. Analytical & Regulatory Chemistry, Inc., Sumter, South Carolina. Report Number ARC-EX-1017-004-P-1. 13 pages.

---

Vol. 4: Wagner Regulatory Associates, Inc. (2011) Willowood Mepi Chlor 4.2% - Product Chemistry Data Waivers. Willowood USA, LLC, Roseburg, OR. 4 pages.

---

Company Official: Lori Kohler  
Name

  
Signature

Company Name: Wagner Regulatory Associates, Inc.  
Agent for Willowood LLC

Company Contact: Lori Kohler  
Name

(302) 635-7281  
Phone



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**1200 Pennsylvania Avenue, N.W.**  
**WASHINGTON, D.C. 20460**

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**Certification with Respect to Citation of Data**

Applicant's/Registrant's Name, Address, and Telephone Number Willowood USA, LLC, P.O. Box 640, Hockessin, DE 19707	EPA Registration Number/File Symbol 87290-
Active Ingredient(s) and/or representative test compound(s) Mepiquat chloride	Date October 12, 2011
General Use Pattern(s) (list all those claimed for this product using 40 CFR Part 158) Terrestrial Food & Non-food; Residential Indoor & Outdoor; Greenhouse Non-Food	Product Name Willowood Mepi Chlor 4.2%

**NOTE:** If your product is a 100% repackaging of another purchased EPA-registered product labeled for all the same uses on your label, you do not need to submit this form. You must submit the Formulator's Exemption Statement (EPA Form 8570-27).

☐ I am responding to a Data-Call-In Notice, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose).

**SECTION I: METHOD OF DATA SUPPORT (Check one method only)**

☐ I am using the cite-all method of support, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose).

☒ I am using the selective method of support (or cite-all option under the selective method), and have included with this form a completed list of data requirements (the Data Matrix form must be used).

**SECTION II: GENERAL OFFER TO PAY**

[Required if using the cite-all method or when using the cite-all option under the selective method to satisfy one or more data requirements]

☒ I hereby offer and agree to pay compensation, to other persons, with regard to the approval of this application, to the extent required by FIFRA.

**SECTION III: CERTIFICATION**

I certify that this application for registration, this form for reregistration, or this Data-Call-In response is supported by all data submitted or cited in the application for registration, the form for reregistration, or the Data-Call-In response. In addition, if the cite-all option or cite-all option under the selective method is indicated in Section I, this application is supported by all data in the Agency's files that (1) concern the properties or effects of this product or an identical or substantially similar product, or one or more of the ingredients in this product; and (2) is a type of data that would be required to be submitted under the data requirements in effect on the date of approval of this application if the application sought the initial registration of a product of identical or similar composition and uses.

I certify that for each exclusive use study cited in support of this registration or reregistration, that I am the original data submitter or that I have obtained the written permission of the original data submitter to cite that study.

I certify that for each study cited in support of this registration or reregistration that is not an exclusive use study, either: (a) I am the original data submitter; (b) I have obtained the permission of the original data submitter to use the study in support of this application; (c) all periods of eligibility for compensation have expired for the study; (d) the study is in the public literature; or (e) I have notified in writing the company that submitted the study and have offered (i) to pay compensation to the extent required by sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA; and (ii) to commence negotiations to determine the amount and terms of compensation, if any, to be paid for the use of the study.

I certify that in all instances where an offer of compensation is required, copies of all offers to pay compensation and evidence of their delivery in accordance with sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA are available and will be submitted to the Agency upon request. Should I fail to produce such evidence to the Agency upon request, I understand that the Agency may initiate action to deny, cancel or suspend the registration of my product in conformity with FIFRA.

I certify that the statements I have made on this form and all attachments to it are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

Signature 	Date 10/12/2011	Typed or Printed Name and Title Lori Kohler, Agent
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## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

401 M Street, S.W.

WASHINGTON, D.C. 20460

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## DATA MATRIX

Date: October 12, 2011	EPA Reg No./ File Symbol: 87290-	Page 1 of 3
Applicant's/Registrant's Name and Address: Willowood USA, LLC c/o Wagner Regulatory Associates Inc. P.O. Box 640 Hockessin, DE 19707	Product: Willowood Mepi Chlor 4.2%	
Ingredient: Mepiquat chloride		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
<b>PRODUCT SPECIFIC</b>					
830.1550, 830.1600, 830.1620, 830.1650, 830.1670,	Product identity & Composition/Description of Materials Used to Produce the Product/Description of Production & Formulation Process/Discussion of Formation of Impurities		Willowood USA, LLC	Own	
830.1700	Preliminary Analysis		Willowood USA, LLC	Own	
830.1750	Certification of Limits		Willowood USA, LLC	Own	1
830.1800	Enforcement Analytical Method		Willowood USA, LLC	Own	
830.6302	Color		Willowood USA, LLC	Own	
830.6303	Physical State		Willowood USA, LLC	Own	
830.6304	Odor		Willowood USA, LLC	Own	
830.6313	Stability to Normal & Elevated Temperatures		Willowood USA, LLC	Own	
830.6314	Oxidation/Reduction		Willowood USA, LLC	Own	
830.6315	Flammability		Willowood USA, LLC	Own	
830.6316	Explosibility		Willowood USA, LLC	Own	
830.6317	Accelerated Storage Stability		Willowood USA, LLC	Own	
830.6319	Miscibility		Willowood USA, LLC	Own	
830.6320	Corrosion Characteristics		Willowood USA, LLC	Own	
830.6321	Dielectric Breakdown Voltage		Willowood USA, LLC	Own	
830.7000	pH		Willowood USA, LLC	Own	
830.7050	UV/Visible Light Absorption		Willowood USA, LLC	Own	
830.7100	Viscosity		Willowood USA, LLC	Own	
830.7200	Melting Point		Willowood USA, LLC	Own	
830.7220	Boiling Point		Willowood USA, LLC	Own	

Signature 	Name and Title Lori Kohler, Agent for Willowood USA, LLC	Date 10/12/2011
--	--	--------------------



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

401 M Street, S.W.

WASHINGTON, D.C. 20460

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## DATA MATRIX

Date: October 12, 2011	EPA Reg No./ File Symbol: 87290-	Page 2 of 3
Applicant's/Registrant's Name and Address: Willowood USA, LLC c/o Wagner Regulatory Associates Inc. P.O. Box 640 Hockessin, DE 19707	Product:  Willowood Mepi Chlor 4.2%	
Ingredient: Mepiquat chloride		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.7300	Relative Density		Willowood USA, LLC	Own	
830.7370	Dissociation Constants in Water		Willowood USA, LLC	Own	
830.7520	Particle Size, Fiber Length, and Diameter Distribution		Willowood USA, LLC	Own	
830.7550, 7560, 7570	Octanol/Water Partition Coefficient		Willowood USA, LLC	Own	
830.7840, 7860	Water Solubility		Willowood USA, LLC	Own	
830.7950	Vapor Pressure		Willowood USA, LLC	Own	
870.1100, 870.1200, 870.1300, 870.2400, 870.2500, 870.2600	Acute Oral Toxicity, Acute Dermal Toxicity, Acute Inhalation Toxicity, Primary Eye Irritation, Primary Dermal Irritation, Skin Sensitization	Cite All	Bayer CropScience LP Research Triangle Park, NC Aceto Agricultural Chemicals Corp. Fort Washington, NY BASF Corporation Research Triangle Park, NC Loveland Products, Inc. Greeley, CO Albaugh Inc., Ankeny, IA Nufarm USA, Inc. Research Triangle Park, NC Arysta LifeScience North America, LLC, Cary, NC Spray Drift Task Force Washington, DC Gowan Pacific Group, LLC Yuma, AZ	Pay	

Signature

Name and Title

Lori Kohler,  
Agent for Willowood USA, LLC

Date

10/12/2011

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## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

401 M Street, S.W.

WASHINGTON, D.C. 20460

**Paperwork Reduction Act Notice:** The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and 0.25 hours per response for reregistration and special review activities, including time for reading the instruction and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington DC 20460. Do not send the form to this address.

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Date: October 12, 2011	EPA Reg No./ File Symbol: 87290-	Page 3 of 3
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Ingredient: Mepiquat chloride		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
			Outdoor Residential Exposure Task Force, Washington, DC		
			Agricultural Reentry Task Force Washington, DC		
			Integrated Farming, Inc., Raleigh, NC		
			FIFRA Endangered Species Task Force Washington, DC		
			The Hide Group, Inc. Sardis, MS		
			Agricultural Handlers Exposure Task Force, Macon, MO		
			Gro-Pro, LLC Gig Harbor, WA		
			U.S.A. Ag Chemicals, Inc. Washington, DC		
			Tacoma Ag, LLC Brookfield, CT		
			Agsaver, LLC Washington, DC		
			Generic Endangered Species Task Force, Gig Harbor, WA		

Footnotes: 1) Certification of Limits is provided in the Confidential Statement of Formula EPA form 8574-4

Signature 	Name and Title Lori Kohler, Agent for Willowood USA, LLC	Date 10/12/2011
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United States  
**Environmental Protection Agency**  
 Washington, DC 20460  
**Formulator's Exemption Statement**  
 (40 CFR 152.85)

Applicant's Name and Address  Willowood USA LLC c/o Wagner Regulatory Associates, Inc. P.O. Box 640 Hockessin, DE 19707	EPA File Symbol/Registration Number <b>87290-</b>
	Product Name Willowood Mepi Chlor 4.2%
	Date of Confidential Statement of Formula (EPA Form 8570-4) 10/12/2011

As an authorized representative of the applicant for registration of the product identified above, I certify that:

- (1) This product contains the following active ingredient(s):

Mepiquat chloride

- (2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another person and meets the requirements of 40 CFR section 158.50(e)(2) or (3).

- (3) Indicate by checking (A) or (B) below which paragraph applies:

- ☒ (A) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).

OR

- ☐ (B) The Confidential Statement of Formula (CSF)(EPA Form 8570-4) referenced above and on file with the EPA is complete, current, an accurate and contains the information required on the current CSF.

- (4) The following active ingredients in this product qualify for the formulator's exemption.

Source		
Active Ingredient	Product Name	Registration Number
Mepiquat chloride	[REDACTED]	[REDACTED]
	[REDACTED]	
Signature 	Name and Title Lori Kohler, Agent	Date 10/12/2011

EPA Form 8570-27 (Rev. 06-2004)

Copy 1 - EPA  
 Copy 2 - Applicant copy

\*Product ingredient source information may be entitled to confidential treatment\*



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WASHINGTON, D.C. 20460

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Ingredient: Mepiquat chloride		

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
PRODUCT SPECIFIC					
			Willowood USA, LLC	Own	
			Willowood USA, LLC	Own	
			Willowood USA, LLC	Own	1
			Willowood USA, LLC	Own	
			Willowood USA, LLC	Own	
			Willowood USA, LLC	Own	
			Willowood USA, LLC	Own	
			Willowood USA, LLC	Own	
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			Willowood USA, LLC	Own	
			Willowood USA, LLC	Own	
			Willowood USA, LLC	Own	

Signature 	Name and Title Lori Kohler, Agent for Willowood USA, LLC	Date 10/12/2011
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			Willowood USA, LLC	Own	
			Willowood USA, LLC	Own	
			Willowood USA, LLC	Own	
			Bayer CropScience LP Research Triangle Park, NC	Pay	
			Aceto Agricultural Chemicals Corp. Fort Washington, NY		
			BASF Corporation Research Triangle Park, NC		
			Loveland Products, Inc. Greeley, CO		
			Albaugh Inc., Ankeny, IA		
			Nufarm USA, Inc. Research Triangle Park, NC		
			Arysta LifeScience North America, LLC, Cary, NC		
			Spray Drift Task Force Washington, DC		
			Gowan Pacific Group, LLC Yuma, AZ		

Signature 	Name and Title Lori Kohler, Agent for Willowood USA, LLC	Date 10/12/2011 129
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WASHINGTON, D.C. 20460

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			FIFRA Endangered Species Task Force Washington, DC		
			The Hide Group, Inc. Sardis, MS		
			Agricultural Handlers Exposure Task Force, Macon, MO		
			Gro-Pro, LLC Gig Harbor, WA		
			U.S.A. Ag Chemicals, Inc. Washington, DC		
			Tacoma Ag, LLC Brookfield, CT		
			Agsaver, LLC Washington, DC		
			Generic Endangered Species Task Force, Gig Harbor, WA		

Footnotes: 1) Certification of Limits is provided in the Confidential Statement of Formula EPA form 8574-4

Signature 	Name and Title Lori Kohler. Agent for Willowood USA, LLC	Date 10/12/2011
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# Certification with Respect to Label Integrity

version: 9/11/02

I certify that the information (including, but not limited to, text, tables, and graphics) contained in the electronic file identified below by file name and submitted with this certification is the same information as that on the paper copies of these documents included with this submission.

PROPOSED LABEL		
EPA Registration #	Date Submitted to EPA	Electronic file name
87290-	10/12/2011	087290.xxxxx.20111012.V1.pdf

I certify that the statements that I have made on this form are true, accurate, and complete. I acknowledge that any knowingly false or misleading statements may be punishable by fine or imprisonment or both under applicable law.



Signature

October 12, 2011

Date

Lori Kohler

Name (typed)

Agent for Willowood USA LLC

Title



## There is an **ELECTRONIC LABEL** for this action

You can use Acrobat to compare the e-label to the previous version (and find the changes). You can also use Acrobat to mark-up the e-label with your comments.

If e-label was submitted via

**CD-ROM with paper application**

then you will find e-label in

**Electronic Label Library**

If the e-label is not found in the ELL then it was probably not named correctly and could not be entered into the ELL. However, the file can be retrieved from the CD which is retained by the Front End

or

If e-label was submitted via

**XML E-Submission (no paper)**

then you will find e-label in

**Documentum**

See overview of processing e-labels on other side of this sheet.

If you have any questions on e-labels, please contact one of your division e-label experts:

AD	Willie Abney	308-1689
	Renae Whitaker	308-7003
	Tracy Lantz	308-6415
BPPD		
RD	Tom Harris	308-9423



# PROCESSING ELECTRONIC LABELS

(rev. 1/5/09, tch)

If e-label submitted via XML e-submission (not on CD-ROM), you may wish to find e-label in Documentum, save e-label to "My Documents", add e-label to ELL, start below at step 5.

## Initial E-Label per application (on CD-ROM with paper via ITRMD)

<sup>1</sup> ITRMD receives paper submission w/ e-label on CD

<sup>2</sup> Tracking record added to OPPIN

<sup>3</sup> ITRMD adds e-label to ELL

<sup>4</sup> ITRMD sends paper submission to AD/BPPD/RD

<sup>5</sup> Connect ELL record with OPPIN S#

in-process

<sup>6</sup> Save copy of e-label from ELL to My Documents

<sup>7</sup> Review label  
(if acceptable, skip to step 20)

<sup>8</sup> Add comments to e-label  
(save, add "with comments" to filename)

<sup>9</sup> Print annotated e-label  
(use "Print with Filename")

review

<sup>10</sup> Send annotated e-label to registrant via email  
(also send "How To Print")

<sup>11</sup> File print of annotated e-label and email in jacket

<sup>12</sup> Add annotated e-label to ELL

<sup>13</sup> Close submission in OPPIN

out-process

## Resubmission (via email to staffer or PM)

<sup>14</sup> Receive email submission w/ e-label attached

<sup>15</sup> Add tracking record to OPPIN

<sup>16</sup> Add e-label to ELL

<sup>17</sup> Connect ELL record with OPPIN S#

in-process

<sup>18</sup> Save copy of e-labels (old & new) from ELL to My Documents

<sup>19</sup> Compare old and new labels with Acrobat

(if revisions needed repeat steps 8-19)

review

<sup>20</sup> Print e-label, stamp, write cover letter  
(use "Print with Filename")

<sup>21</sup> Mail stamped label & cover letter to registrant

<sup>22</sup> File stamped label & cover letter in jacket

<sup>23</sup> Add cover letter to ELL  
(mandatory if accepted with comments)

<sup>24</sup> Close submission in OPPIN

out-process

### process - big picture

- 1- create OPPIN tracking
- 2- put label in ELL; link to S#
- 3- save ELL label to MyDocuments
- 4- compare / comment
- 5- outprocess

### techniques to know

- filename for e-labels
- "print with filename"
- compare / comment
- printing with comments

66330-241

05/16/2011

1/13



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF  
CHEMICAL SAFETY AND  
POLLUTION PREVENTION

W. A. Hawkins, Jr., Ph.D.  
Arysta LifeScience North America, LLC  
15401 Weston Parkway, Suite 150  
Cary, NC 27513

MAY 16 2011

Subject: Application for Pesticide Notification (PRN 2007-4)  
Submission date: 4/7/11  
Product Name: Mep i chlor 4.2% Liquid  
EPA Reg. No.: 66330-241  
EPA Decision Number: 447912

Dear Dr. Hawkins,

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 2007-4. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 2007-4 and finds that the action(s) requested fall within the scope of PRN2007-4.

The Agency acknowledges the addition of Container Disposal language in the *Storage and Disposal* Section on page 3 of 10.

The label submitted with the application has been stamped "Notification" and will be placed in our records. If you have questions concerning this letter, please contact Erin Malone at 703-347-0253 or me at 703-308-3194.

Sincerely,


A handwritten signature in black ink, appearing to read "Shaja B. Joyner", is written over the typed name.

Shaja B. Joyner  
Product Manager 20  
Fungicide Branch  
Registration Division (7504P)

2/13

Please read instructions on reverse before completing form.

Form Approved, OMB No. 2070-0060, Approval expires 05-31-98

 <b>EPA</b>	United States <b>Environmental Protection Agency</b> Washington, DC 20460	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other:	OPP Identifier Number
	<b>Application for Pesticide - Section I</b>		

1. Company/Product Number 66330-241	2. EPA Product Manager Shaja B. Joiner	3. Proposed Classification <input type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) MEPICHLOR 4.2% LIQUID	PM# 20	
5. Name and Address of Applicant (Include ZIP Code) Arysta LifeScience North America, LLC 15401 Weston Parkway, Suite 150 Cary, NC 27513 <input type="checkbox"/> Check if this is a new address		6. <b>Expedited Review.</b> In accordance with FIFRA Section 3(c)(3) (b)(I), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____

**Section - II**

<input type="checkbox"/> Amendment - Explain below. <input type="checkbox"/> Resubmission in response to Agency letter dated _____ <input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____ <input type="checkbox"/> "Me Too" Application <input type="checkbox"/> Other - Explain below
<p><b>Explanation:</b> Use additional page(s) if necessary. (For Section I and Section II.)          Notification of container disposal changes per PR Notice 98-10 and 2007-4. This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.  <b>There are no PRIA fees associated with this action.</b></p>	

**Section - III**

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify)	
*Certification must be submitted		If "Yes" Unit Packaging wgt. No. per container	If "Yes" Package wgt. No. per container		
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 2.5, 30 and 250 gallons		5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On labeling accompanying product	
6. Manner In Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Other _____ <input checked="" type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled					

**Section - IV**

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application)		
Name W. A. Hawkins, Jr., Ph.D.	Title Regulatory Manager	Telephone No. (Include Area Code) 919-678-4886
<b>Certification</b> I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title Regulatory Manager	
4. Typed Name W. A. Hawkins, Jr., Ph.D.	5. Date 05/02/11	



Arysta LifeScience

April 6, 2011

Ms. Shaja B. Joyner, PM 20  
Document Processing Desk (NOTIF)  
Office of Pesticide Programs – 7504P  
U.S. Environmental Protection Agency  
Room S-4900, One Potomac Yard  
2777 S. Crystal Drive  
Arlington, VA 22202

**Subject: MEPICHLOR 4.2% LIQUID (EPA Reg. No. 66330-241)**  
**Notification of Change in Container Disposal Instructions**

Dear Ms. Joyner:

This is to notify the Agency that Arysta LifeScience North America, LLC is adding container disposal instructions for rigid non-refillable containers with capacities greater than five gallons or 50 pounds to the label of MEPICHLOR 4.2% LIQUID (EPA Reg. No. 66330-241). The container disposal language being used has been copied directly from PR Notice 2007-4. This PR Notice allows changes of this type to be completed by notification. Two copies of the label are enclosed: a clean copy and a copy with the changes clearly marked.

We believe this is a non-PRIA action that does not require a fee payment. If you have any questions or require additional information, you may contact me at (919) 678-4886 or by e-mail at [alex.hawkins@arystalifescience.com](mailto:alex.hawkins@arystalifescience.com).

Sincerely,

W. A. Hawkins, Jr., Ph.D.  
Regulatory Manager

4/13

# NOTIFICATION

MAY 16 2011



Arysta LifeScience

## MEPICHLOR 4.2% LIQUID

### ACTIVE INGREDIENT:

Mepiquat Chloride, N,N-dimethylpiperidinium Chloride .....4.2%

INERT INGREDIENTS: .....95.8%

TOTAL .....100.0%

Contains 0.35 pounds active ingredient per gallon

**KEEP OUT OF REACH OF CHILDREN**

### CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.  
(If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID	
IF IN EYES:	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
IF SWALLOWED:	<ul style="list-style-type: none"> <li>• Call poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.</li> </ul>
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice</li> </ul>
NOTE TO PHYSICIAN: No known antidote, treat symptomatically.	

**EMERGENCY CONTACT:** Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-866-303-6952 for emergency medical treatment information. In case of large-scale spillage regarding this product, call CHEMTREC at 1-800-424-9300.

**See Additional Precautionary Statements Inside Booklet**

EPA Reg. No. 66330-241

EPA Est. No.

AD 02272009

**Net Contents:**

Product of U.S.A.

**Manufactured For:**

ARYSTA LIFESCIENCE NORTH AMERICA, LLC  
15401 Weston Parkway, Suite 150  
Cary, NC 27513

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

#### CAUTION

Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with eyes, skin and clothing.

### PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance selection chart.

Applicators and other handlers must wear:

1. Long-sleeved shirt and long pants
2. Chemical-resistant gloves such as Nitrile, Butyl, Neoprene, and/or Barrier Laminate.
3. Shoes plus socks

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present or to intertidal area below the high water mark. Do not contaminate water when disposing of rinsate or equipment washwater. Do not contaminate water by cleaning of equipment or disposal of wastes.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Do not apply this product through any type of irrigation system.



### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment and restricted-entry intervals.

The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water, is:

1. Coveralls
2. Chemical resistant gloves made of any waterproof material
3. Shoes plus socks

### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**STORAGE:** Store in locked area in original container only, with lid tightly closed. Store separately from other pesticides and fertilizers, food and feed to prevent contamination. Use care to avoid puncturing container during storage or transit. In case of a spill or leaking container, call CHEMTREC at 1-800-424-9300.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

### CONTAINER DISPOSAL:

Rigid Non-refillable containers that are small enough to shake (i.e., with capacities less than 5 gallons or 50 lbs)

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Rigid Non-refillable containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs)

Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

### GENERAL INFORMATION

Mepichlor 4.2 is an Arysta LifeScience North America, LLC product which is equivalent to PIX Plant Regulator

produced by BASF Corporation. Mepichlor 4.2 is a foliar applied plant regulator. It allows the grower to manage the cotton plant for short-season production leading to reduced risk of yield and quality loss due to delayed and prolonged harvest. Benefits derived from the use of Mepichlor 4.2 include increased early boll retention and/or larger bolls, reduced plant height which provides a more open canopy, less boll rot, improved defoliation, less trash and lower ginning costs, better harvest efficiency and a darker leaf color. These benefits can provide for earlier maturity and often result in improved yields.

#### **Early Application of Mepichlor 4.2**

Growers may use low-rate multiple applications, or higher, less frequent dosages which provide maximum flexibility under a wide range of growing conditions. Mepichlor 4.2 should not be applied to plants under stress. If stress is alleviated, plants should be evaluated for vegetative growth before additional applications are made. Mepichlor 4.2 may be tank mixed with insecticides/miticides when application timing coincide. (See RESTRICTIONS AND LIMITATIONS)

Fields should be carefully scouted. Mepichlor 4.2 should not be applied if plants are under any form of stress. In the absence of stress, a maximum of five low rate applications can be made each season. The first application can be applied at the matchhead square stage. The rate and timing of subsequent applications depend on growing conditions and desired benefits. Under good growing conditions, additional treatments of 2-4 fluid ounces per acre can be made at 7-14 day intervals. Higher rates of Mepichlor 4.2 (1/4 - 3/4 pt/A) should be used if vegetative growth becomes excessive or a greater degree of height control is desired. Do not use more than a total of 48 fl oz of Mepichlor 4.2 per acre in a growing season.

If significant loss of squares and/or young bolls has occurred earlier due to insect pressure or other stresses, but now these stresses have been alleviated, the need for Mepichlor 4.2 is increased - excess vegetative growth is likely because of poor fruit load.

#### **Late Season Application of Mepichlor 4.2**

Late application of Mepichlor 4.2 (approximately during the fourth to sixth week of blooming) can provide certain benefits to cotton. However, it should not and does not substitute for early season use, the time of the greatest benefit from the use of Mepichlor 4.2. Late season application can lead to one or more of the following: reduction in late season vegetative growth or regrowth after cutout or defoliation, more complete and manageable cutout, better defoliation, earlier maturity and reduction in trash and lower ginning costs. Some of these effects may favorably influence the yield potential and fiber quality. A late season application of Mepichlor 4.2 should be applied only if fields are not drought or nutrient stressed; that is, those fields likely to experience additional vegetative growth or regrowth. However, fields that are very rank and extremely vigorous due to a combination of poor boll load and excellent growing conditions may not respond as much as desired to late season applications at the suggested rates.

#### **Timing for Late Season Applications**

A. On fields where cotton cuts out and then starts regrowth: apply when regrowth begins, as evidenced by new leaves in the terminal and stem elongation. This would often, but not always, be in the period of 5-6 weeks after the first bloom.

B. On fields where cotton never completely cuts out, apply Mepichlor 4.2 when there are 4-6 nodes above the white flower (NAWF). Measure NAWF by counting the number of mainstem nodes from the first position white bloom (the one closest to the mainstem) to the terminal. Count the node with the first position white bloom as zero and the last node in the terminal, which is counted, should have a leaf at least the size of a quarter. Generally, the NAWF first reaches 4-6 during the fourth to sixth week of bloom. During this time period, the NAWF should be decreasing about one node every 5-6 days - if its rate of decrease is less, this means that the plant is not cutting out soon enough (the crop is too vigorous). If the fifth week of bloom arrives and NAWF is still above 5-6, apply Mepichlor 4.2.

### Use Rate for Late Season Application

Mepichlor 4.2 should be applied at a rate between 1/2 pint to 1 1/2 pints per acre. Use the lower rate range on cotton with only moderate additional growth potential, and the higher rate range on fields likely to continue vigorous growth. Total seasonal use per season (early plus late application) must not exceed 3 pt/A.

### SPRAY VOLUMES

Thorough coverage is required

#### IN WATER:

*Areas other than California:*

Ground Application - Use a minimum of 2 gallons of water per acre.

Aerial Application - Use a minimum of 2 gal/A.

*California Only:*

Ground Application - Use a minimum of 5 gal/A.

Aerial Application - Use a minimum of 5 gal/A.

#### IN OIL:

Use a minimum total oil volume of 2 pt/A for ultra low volume (ULV) aerial application. Application in oil is permitted only in AL, AR, FL, GA, LA, MO, MS, NC, OK, SC, TN and TX. Use a nonphytotoxic oil concentrate which contains either a petroleum or vegetable oil base, contains only EPA-exempt ingredients, provides good mixing quality in the jar test (see "Compatibility" section), and has been used successfully in your locality. The oil diluent should contain emulsifiers which provide good mixing quality. If the oil does not contain an emulsifier, one must be added during mixing at a volume equal to 3% of the final volume of the mixing tank. Do not apply Mepichlor 4.2 as ULV without using emulsifiers. If using a vegetable oil based product, only highly refined concentrates should be used.

Mix under constant agitation. Pour one-half of the required volume of oil into the spray tank, followed by the emulsifier (if the oil does not already contain one) at approximately 3% of the final spray tank volume, and then pour in the Mepichlor 4.2 while the remainder of the oil is added. Constant, moderate agitation is required during and after mixing and during application.

### SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
- Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

### AERIAL DRIFT REDUCTION ADVISORY INFORMATION

**INFORMATION ON DROPLET SIZE:** The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

### CONTROLLING DROPLET SIZE

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

**BOOM LENGTH:** For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

**APPLICATION HEIGHT:** Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

**SWATH ADJUSTMENT:** When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

**WIND:** Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

**TEMPERATURE AND HUMIDITY:** When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

**TEMPERATURE INVERSIONS:** Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

**SENSITIVE AREAS:** The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

### RAIN WASH-OFF PRECAUTION

The use of a high quality, EPA exempt surfactant will enhance the uptake of Mepichlor 4.2 into the plant. Therefore, the use of a surfactant allows applications made as little as 4 hours prior to rainfall to be effective. Without a surfactant, the product should be used at least 8 hours prior to expected rainfall.



## COMPATIBILITY

Mepichlor 4.2 is water based, and is compatible with most insecticides and miticides. If compatibility is in doubt, perform a jar test to check for compatibility. Mepichlor 4.2 can be used with foliar fertilizers if your prior experience shows the combination is compatible and will not injure cotton under your conditions. Caution should be used when applying with foliar fertilizers under conditions of extreme heat.

### RESTRICTIONS AND LIMITATIONS

- Insect or mite damage to Mepichlor 4.2 treated crops can lead to yield decreases or other undesirable effects.
- Do not apply Mepichlor 4.2 to cotton that is under stress. If using low rate multiple applications, discontinue use until your crop has overcome any stress.
- Do not apply more than 48 fl oz of Mepichlor 4.2 per acre per season. The sum of all products and formulations containing mepiquat chloride must not exceed 0.132 pounds (60 grams) of mepiquat chloride per acre per season.
- Do not apply Mepichlor 4.2 within 30 days of harvest.
- Do not graze or feed cotton forage to livestock.
- Mepichlor 4.2 contains a dye and effectiveness is not related to the color of the spray solution.
- Do not tank mix with other products other than those mentioned under "COMPATIBILITY".
- Do not plant another crop within 75 days after last treatment.

### TIME AND RATE OF APPLICATION SHORT-STAPLE AND LONG-STAPLE (PIMA) COTTON

Directions for use should be observed as specified below:

#### I. HIGH RATE SINGLE OR MULTIPLE APPLICATIONS:

Use these instructions when you are not able to start growth regulation treatments early, or when you want to make the fewest number of applications.

AREA	TIME OF APPLICATION	RATE PER ACRE
	<b>First Application</b>	<b>8 to 16 fl oz</b>
AL, AR, AZ, CA, FL, GA, LA, MO, MS, NM, NC, SC, TN, VA	Apply when cotton is actively growing and is between 20 and 30" tall, but not more than 7 days beyond early bloom (5-6 blooms per 25 row feet). Also apply if cotton is 24" tall and has no blooms.	
	<b>Second Application</b>	<b>8 to 16 fl oz</b>
	Make another application in 2 to 3 weeks if additional growth control is desired.	
	<b>Third Application for control of excessive Vegetative Growth</b>	<b>8 to 16 fl oz</b>
	If the cotton field has a history of vigorous growth or a third application 1 to 2 weeks after the second application.	
	<b>Late Season Application</b>	<b>8 to 24 fl oz</b>
	See section titled "Late Season Application of Mepichlor 4.2".	
OK, TX (except Rio Grande Valley)	<b>First Application</b>	<b>8 fl oz</b>
	Apply when cotton is in the early	

Areas without a history of excessive vegetative growth	bloom stage (5-6 blooms per 25 row feet) and actively growing. Also apply if no blooms are present and the cotton is 20" tall and actively growing. See RESTRICTIONS AND LIMITATIONS.	
	<b>Second Application</b>	<b>8 fl oz</b>
	Make a second application in 2 to 3 weeks if additional growth control is desired.	
	<b>Third Application</b>	<b>8 fl oz</b>
	If conditions after the second application of Mepichlor 4.2 continue to favor vigorous growth, apply a third application 1 to 2 weeks after the second application.	
OK, TX Areas with a history of excessive vegetative growth	<b>Late Season Application:</b> See section titled "Late Season Application of Mepichlor 4.2".	<b>8 to 24 fl oz</b>
	<b>First Application</b>	<b>16 fl oz</b>
	For best results, apply when plants are in early bloom stage (5-6 blooms per 25 row feet) and an average of 24" tall. Treatments can also be made when cotton height averages a minimum of 20" and a maximum of 30" provided cotton is not more than 7 days beyond early bloom. If cotton is 24" tall and has no blooms, apply Mepichlor 4.2 See RESTRICTIONS AND LIMITATIONS	
	<b>Second Application</b>	<b>8 to 16 fl oz</b>
	For fields with a history of excessive growth, or if conditions after the first application favor excessive growth, make a second application in 2 to 3 weeks.	
	<b>Third Application</b>	<b>8 to 16 fl oz</b>
	If conditions after the second application of Mepichlor 4.2 continue to favor vigorous growth, apply a third application 1 to 2 weeks after the second application.	
	<b>Late Season Application:</b> See section titled "Late Season Application of Mepichlor 4.2".	<b>8 to 24 fl oz</b>



**II. LOW-RATE MULTIPLE APPLICATIONS:**

Use these instructions when you want to maintain maximum flexibility in plant regulation treatments.

AREA	TIME OF APPLICATION	EXCESSIVE GROWTH NOT EXPECTED OR LOWER RATES HAVE NOT WORKED IN THE PAST	EXCESSIVE GROWTH EXPECTED OR HIGHER RATES HAVE BEEN NECESSARY IN THE PAST
AL, AR, AZ, CA, FL, GA, LA, MO, MS, NC, NM, OK, SC, TN, TX, VA	<b>First Application:</b>	2 fl oz	4 fl oz
	Apply at the matchhead square <sup>1</sup> stage of growth.		
	<b>Second Application:</b>	2 fl oz	4 fl oz
	7-14 days later, or when regrowth occurs.		
	<b>Third Application</b>	2 to 4 fl oz*	4 to 8 fl oz*
	7-14 days later, or when regrowth occurs.		
	<b>Fourth Application</b>	2 to 8 fl oz*	4 to 12 fl oz*
	7-14 days later, or when regrowth occurs.		
	<b>Fifth Application</b>	4 to 8 fl oz*	4 to 12 fl oz*
	(If needed): 7-14 days later, or when regrowth occurs.		
	<b>Late Season Application:</b>	8 to 16 fl oz*	12 to 24 fl oz*
	See section titled "Late Season Application of Mepichlor 4.2".		

\*Use the higher rate if previous application was not made or if growing conditions favor excessive growth.

<sup>1</sup>Matchhead square is when the first square of a typical cotton plant is about the size of a match head (about 1/8" in diameter). Make the first application when 50% of the plants have one or more matchhead squares.

**Warranty and Disclaimer Statement**

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Such risks may arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Arysta LifeScience North America Corporation ("Arysta"), and can cause crop injury, injury to non-target crops or plants, ineffectiveness of the product, or other unintended consequences. All such risks shall be assumed by the user or buyer. Arysta warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions. This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to Arysta, and is subject to the inherent risks described above.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, MANUFACTURER, AND SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE USER AND BUYER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. NO AGENT, REPRESENTATIVE OR EMPLOYEE OF ARYSTA IS AUTHORIZED TO MAKE ANY WARRANTY, GUARANTEE OR REPRESENTATION BEYOND THOSE CONTAINED HEREIN OR TO MODIFY THE WARRANTIES CONTAINED HEREIN.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE TOTAL LIABILITY OF ARYSTA, MANUFACTURER, AND SELLER, SHALL BE LIMITED TO THE PURCHASE PRICE PAID, OR AT ARYSTA'S ELECTION, THE REPLACEMENT OF THE PRODUCT.

MEPICHLOR 4.2 LIQUID (MASTER) 022709, NOTIFICATION 04/04/11



United States  
**Environmental Protection Agency**  
 Washington, DC 20460  
**Formulator's Exemption Statement**  
 (40 CFR 152.85)

Applicant's Name and Address  Willowood USA LLC c/o Wagner Regulatory Associates, Inc. P.O. Box 640 Hockessin, DE 19707	EPA File Symbol/Registration Number 87290-GN
	Product Name Willowood Mepi Chlor 4.2%
	Date of Confidential Statement of Formula (EPA Form 8570-4) 11/28/2011

As an authorized representative of the applicant for registration of the product identified above, I certify that:

(1) This product contains the following active ingredient(s):

Mepiquat chloride

(2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another person and meets the requirements of 40 CFR section 158.50(e)(2) or (3).

(3) Indicate by checking (A) or (B) below which paragraph applies:

☒ (A) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).

OR

☐ (B) The Confidential Statement of Formula (CSF)(EPA Form 8570-4) referenced above and on file with the EPA is complete, current, an accurate and contains the information required on the current CSF.

(4) The following active ingredients in this product qualify for the formulator's exemption.

Source		
Active Ingredient	Product Name	Registration Number
Mepiquat chloride	[REDACTED]	[REDACTED]
Signature <i>Lori Kohler</i>	Name and Title Lori Kohler, Agent	Date 11/28/2011

EPA Form 8570-27 (Rev. 06-2004)

Copy 1 - EPA  
 Copy 2 - Applicant copy

\*Product ingredient source information may be entitled to confidential treatment\*

**FOR OFFICIAL USE ONLY**

FILE SYMBOL

87290-GN

REGISTRATION NO.

**CONFIDENTIAL STATEMENT OF FORMULA ENCLOSED**

DATE SUBMITTED	SUBMITTED BY (✓)	
	APPLICANT	BASIC SUPPLIER
10/13/11		

**Do Not Write Comments,  
Formula, or Parts of Formula  
on This Envelope**

**NOTE**

It shall be unlawful—for any person to use for his own advantage or to reveal, other than to the Secretary, or officials or employees of the United States Department of Agriculture or other Federal agencies, or to the courts in response to a subpoena, or to physicians, and in emergencies to pharmacists and other qualified persons, for use in the preparation of antidotes, in accordance with such directions as the Secretary may prescribe, any information relative to formulas of products acquired by authority of Section 4 of the "Federal Insecticide, Fungicide, and Rodenticide Act."

**Pages 149-62 - \*Confidential Statements of Formula may be entitled to confidential treatment\***